

<213> Homo sapiens

<400> 1950

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Met Leu His Glu Arg Leu Ala Pro Leu Leu Lys Arg His Leu Pro Leu
 1           5           10           15
Ala Asp Val Ala Arg Arg Thr Gly Arg His Val Ile Arg Leu Asp Val
 20           25           30
Thr Leu Arg Met Pro Arg Arg Asp Ala His Lys Leu Pro Leu Ala Ile
 35           40           45
Arg Gly Ser Leu Gly Leu Asp Arg Ala Tyr Asn Arg Val Tyr Met Val
 50           55           60
Ala Met Pro Pro Ile Gly Gln Trp His Ser Thr Val Arg Ala Ala Ala
 65           70           75           80
Val Val Phe Ala Pro Glu Pro Ile Ala Leu Cys Phe Arg Gln Pro Ala
 85           90           95
His Ala Leu Cys Ser Thr Ala Gly Val Ala Ala Ser Trp Gln Ala Thr
100          105          110
Pro Arg Ser Ala Pro Ala Ser Ser Leu Thr Ala Pro Gly
115          120          125

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<210> 1951

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1951

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cggccgcccgc ctctccgctc ccggggccccc gccgccaccg cgccccccgc gggagatgga
60
acagcgggaac cggtcgggtg ccctcggata cctgccgcct ctgctgctgc atgccctgct
120
gctcttcgtg gccgacgctg cattcacaga agtccccaaa gatgtgacag tacgggaggg
180
agacgacatc gaaatgccct gcgcgttccg ggccagcggg gccacctcgt attcgctgga
240
gattcagtgg tggtagctca aggagccacc ccgggagctg ctgcacgagc tggcgctcag
300
cgtgccggggc gcccgaggca aggtaacaaa taaggatgca actaaaatca gcaccgtacg
360
cgt
363

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<210> 1952

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1952

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Arg Pro Pro Pro Leu Arg Ser Arg Ala Pro Ala Ala Thr Ala Pro Pro
 1           5           10           15
Ala Gly Asp Gly Thr Ala Glu Pro Ala Arg Cys Pro Arg Ile Pro Ala
 20           25           30
Ala Ser Ala Ala Ala Cys Pro Ala Ala Leu Arg Gly Arg Arg Cys Ile
 35           40           45
His Arg Ser Pro Gln Arg Cys Asp Ser Thr Gly Gly Arg Arg His Arg

```

50	55	60
Asn Ala Leu Arg Val	Pro Gly Gln Arg Ser His Leu Val Phe Ala Gly	
65	70	75
Asp Ser Val Val Val	Pro Gln Gly Ala Thr Pro Gly Ala Ala Ala Arg	80
85	90	95
Ala Gly Ala Gln Arg Ala Gly Arg	Pro Glu Gln Gly Asn Lys	
100	105	110

<210> 1953  
 <211> 329  
 <212> DNA  
 <213> Homo sapiens

<400> 1953  
 acgcgtcagc ctgagcccaa taactataaa agagtcgcaa ccatgactgt gctattgagt  
 60  
 gagcgcagcc agattttccg ggggtgccgat gcctacgcgg tgcggacta cgtcaaccag  
 120  
 catgtgggca gccactgcat tcgcctgcct cccaagggcc ggccacgggc gagtatcagc  
 180  
 catcgcacct ttgccagcct ggacctgtgc cgcacagct acggcgctcc ggtacgggtc  
 240  
 acatcggtgg cgctggagac catctatcac ctgcagatcc tgttgagcgg gcattgccgc  
 300  
 tccagctccc gtggtgagga tgacgtggn  
 329

<210> 1954  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 1954
Thr Arg Gln Pro Glu Pro Asn Asn Tyr Lys Arg Val Ala Thr Met Thr
1 5 10 15
Val Leu Leu Ser Glu Arg Ser Gln Ile Phe Arg Gly Ala Asp Ala Tyr
20 25 30
Ala Val Ser Asp Tyr Val Asn Gln His Val Gly Ser His Cys Ile Arg
35 40 45
Leu Pro Pro Lys Gly Arg Pro Arg Ala Ser Ile Ser His Arg Thr Phe
50 55 60
Ala Ser Leu Asp Leu Cys Arg Ile Ser Tyr Gly Ala Pro Val Arg Val
65 70 75 80
Thr Ser Val Ala Leu Glu Thr Ile Tyr His Leu Gln Ile Leu Leu Ser
85 90 95
Gly His Cys Arg Ser Ser Ser Arg Gly Glu Asp Asp Val
100 105

<210> 1955  
 <211> 415  
 <212> DNA  
 <213> Homo sapiens

<400> 1955



acgcgtggct cgacgaaaac caagtacgag acatgcccga caaggtacta tcacacatgg  
60  
tggaatactg ctggggggcgc ttcacagaca acatcaaata cgctgtagct gcccaatatt  
120  
ggaaagggcc acacaagccc gatagtgacc atcaacggat cattgtaggc tatttcaaaa  
180  
ccgccaaca agccatgaac gcagcaaac aattccactg gaacacccgg ctacaacaac  
240  
aatggaaaac atggatactc ccagtccaca acggcaccgt gtccgagttt ttcaccaac  
300  
aaaaaacttt gctagacgag caagacgata gcaatagcga gctgccggag catctacaaa  
360  
acgtcatgtg cggcaaaaaca ctccaccacc aagacgacac catatcgtgg tgcac  
415

<210> 1956  
<211> 127  
<212> PRT  
<213> Homo sapiens

<400> 1956  
Met Pro Asp Lys Val Leu Ser His Met Val Glu Tyr Cys Trp Gly Arg  
1 5 10 15  
Phe Thr Asp Asn Ile Lys Tyr Ala Val Ala Ala Gln Tyr Trp Lys Gly  
20 25 30  
Pro His Lys Pro Asp Ser Asp His Gln Arg Ile Ile Val Gly Tyr Phe  
35 40 45  
Lys Thr Ala Lys Gln Ala Met Asn Ala Ala Lys Gln Phe His Trp Asn  
50 55 60  
Thr Arg Leu Gln Gln Gln Trp Lys Thr Trp Ile Leu Pro Val His Asn  
65 70 75 80  
Gly Thr Val Ser Glu Phe Phe Thr Gln Gln Lys Thr Leu Leu Asp Glu  
85 90 95  
Gln Asp Asp Ser Asn Ser Glu Leu Pro Glu His Leu Gln Asn Val Met  
100 105 110  
Cys Gly Lys Thr Leu His His Gln Asp Asp Thr Ile Ser Trp Cys  
115 120 125

<210> 1957  
<211> 526  
<212> DNA  
<213> Homo sapiens

<400> 1957  
acgcgttccg gagagatttt cctaacctct ctccgagctg ctgagccgat cggtgaccac  
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caggagctcc tccctgtgag gacaaagttc cagagtcggg gtcacggggc ttacttattg  
120  
gggaggaggc ccgccggggc cgcagtgggc gagggggcct tggcgcgctc ctgggaggtc  
180  
agacctggca cagtgtggcg aaggtttcca gtgcgatccc gagtcgaggg cgcatttcgc  
240  
ggtgactgcc agcatgaacc gcagccgacc gagttctgcg atcgggcttc tccgcagagt  
300

ggggaccctg gggaaggcgc caacttctct cctctgccc cctcactccc cgcgggcgtc  
360  
cctggggccgc ctgcccgggc cgcactgggc ggctccatc gtcccttccc tctacctgca  
420  
ctgccccagg cgggagagag gccttggccc nncgaggac cagctgcagc gggcagcggg  
480  
gtcctgctcc cccaaccccc gcccatggc acggggctga accggt  
526

<210> 1958  
<211> 175  
<212> PRT  
<213> Homo sapiens

<400> 1958  
Thr Arg Ser Gly Glu Ile Phe Leu Thr Ser Leu Arg Ala Ala Glu Pro  
1 5 10 15  
Ile Gly Asp His Gln Glu Leu Leu Pro Val Arg Thr Lys Phe Gln Ser  
20 25 30  
Arg Gly His Gly Pro Tyr Leu Leu Gly Arg Arg Pro Ala Gly Ala Ala  
35 40 45  
Val Gly Glu Gly Pro Leu Ala Arg Ser Trp Glu Val Arg Pro Gly Thr  
50 55 60  
Val Trp Arg Arg Phe Pro Val Arg Ser Arg Val Glu Gly Ala Phe Arg  
65 70 75 80  
Gly Asp Cys Gln His Glu Pro Gln Pro Thr Glu Phe Cys Asp Arg Ala  
85 90 95  
Ser Pro Gln Ser Gly Asp Pro Gly Glu Gly Ala Asn Phe Ser Pro Leu  
100 105 110  
Pro Thr Ser Leu Pro Ala Gly Val Pro Gly Pro Pro Ala Arg Ala Ala  
115 120 125  
Leu Gly Gly Leu His Arg Pro Phe Pro Leu Pro Ala Leu Pro Gln Ala  
130 135 140  
Gly Glu Arg Pro Trp Pro Xaa Glu Gly Pro Ala Ala Ala Gly Ser Gly  
145 150 155 160  
Val Leu Leu Pro Gln Pro Pro Pro His Gly Thr Gly Leu Asn Arg  
165 170 175

<210> 1959  
<211> 378  
<212> DNA  
<213> Homo sapiens

<400> 1959  
gtgcaccgga cggctcctcc aacggatcat gcgacggccc agcgggaaggc tcacccgagt  
60  
cgtcagaagg atcagggcgc ttgtcgctgt cagacttcag gacatccac gacatggtga  
120  
acggctggga ggagaccttg tccccgtcgg tcttggcgcc gacaacaaca ccgctcatgg  
180  
tgtattttcc ggcattgagt aagaaccagt gggcatgctg atgacccttg atcggcagtg  
240  
aggctccttt gaccacctga tatgtgtcat cagcgaggaa ggtgccgagt ttggcgttct  
300

cgtctgcctc gggatgaattg ccgaggaggt acatcttgcc tggacccgta atcgcggtga  
360  
agtcgacgcg caacgcgt  
378

<210> 1960  
<211> 111  
<212> PRT  
<213> Homo sapiens

<400> 1960  
Met Tyr Leu Leu Gly Asn Ser Pro Glu Ala Asp Glu Asn Ala Lys Leu  
1 5 10 15  
Gly Thr Phe Leu Ala Asp Asp Thr Tyr Gln Val Val Lys Gly Ala Ser  
20 25 30  
Leu Pro Ile Lys Gly His Gln His Ala His Trp Phe Phe Thr His Ala  
35 40 45  
Gly Lys Tyr Thr Met Ser Gly Val Val Val Gly Ala Lys Thr Asp Gly  
50 55 60  
Asp Lys Val Ser Ser Gln Pro Phe Thr Met Ser Trp Asp Val Leu Lys  
65 70 75 80  
Ser Asp Asp Asp Lys Arg Pro Asp Pro Ser Asp Asp Ser Gly Glu Pro  
85 90 95  
Ser Ala Gly Pro Ser His Asp Pro Leu Glu Glu Pro Ser Gly Ala  
100 105 110

<210> 1961  
<211> 384  
<212> DNA  
<213> Homo sapiens

<400> 1961  
ggatccaccc cggaaaccgg caggatgaag ggggcaagtg aggagaagct ggcattctgtg  
60  
tccaacctgg tcaactgtgtt tgagaatagc aggaccccag aagcagcacc cagaggccag  
120  
aggctagagg acgtgcatca ccgccctgag tgcaggcctc ccgagtcacc aggaccacgg  
180  
gagaagacga atgtcgggga ggccgtgggg tctgagccca ggacagtcag caggaggtac  
240  
ctgaactccc tgaagaacaa gctgtccagc gaagcctgga ggaaatcttg ccagcctgtg  
300  
accctctcag gatcggggac gcaggagcca gagaagaaga tcgtccagga gctgctggag  
360  
acagagcagg cctatgtggc gcgc  
384

<210> 1962  
<211> 128  
<212> PRT  
<213> Homo sapiens

<400> 1962  
Gly Ser Thr Pro Glu Thr Gly Arg Met Lys Gly Ala Ser Glu Glu Lys

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1      5      10      15
Leu Ala Ser Val Ser Asn Leu Val Thr Val Phe Glu Asn Ser Arg Thr
      20      25      30
Pro Glu Ala Ala Pro Arg Gly Gln Arg Leu Glu Asp Val His His Arg
      35      40      45
Pro Glu Cys Arg Pro Pro Glu Ser Pro Gly Pro Arg Glu Lys Thr Asn
      50      55      60
Val Gly Glu Ala Val Gly Ser Glu Pro Arg Thr Val Ser Arg Arg Tyr
65      70      75      80
Leu Asn Ser Leu Lys Asn Lys Leu Ser Ser Glu Ala Trp Arg Lys Ser
      85      90      95
Cys Gln Pro Val Thr Leu Ser Gly Ser Gly Thr Gln Glu Pro Glu Lys
      100      105      110
Lys Ile Val Gln Glu Leu Leu Glu Thr Glu Gln Ala Tyr Val Ala Arg
      115      120      125

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<210> 1963  
 <211> 323  
 <212> DNA  
 <213> Homo sapiens

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<400> 1963
nnncccttcc tacctcccca tactccccac cctcttctct cccctgtgca tgagcttgca
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ggcatgaaac accacactgg cctctctccc tctgttttgc ccttctgtc gtctctctcc
120
cacagctgcc tggctcttcg gcgtcagtc accaccttct gcagctctcc ctcaccctgg
180
cgaccactca ggcatgcac tcgcggggccc ccttcagacc tctcgggggc atcttcccct
240
tccctggcca ttatctttct tcactctgggc tgggcccggg gggcggttcc ccccttctct
300
cttctttctt tttttttctc ttt
323

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<210> 1964  
 <211> 107  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1964
Xaa Pro Phe Leu Pro Ser His Thr Pro His Pro Ser Ser Ser Pro Cys
1      5      10      15
Ala Glu Leu Ala Gly Met Lys His Pro Pro Gly Leu Ser Pro Ser Val
      20      25      30
Leu Pro Leu Leu Ser Ser Leu Ser His Ser Cys Leu Ala Leu Arg Arg
      35      40      45
Gln Ser Thr Thr Phe Cys Ser Ser Pro Ser Pro Trp Arg Pro Leu Arg
      50      55      60
His Ala Ser Arg Gly Pro Pro Ser Asp Leu Ser Gly Ser Ser Ser Pro
65      70      75      80
Ser Leu Ala Ile Ile Phe Leu His Leu Gly Trp Ala Arg Arg Gly Val
      85      90      95
Pro Pro Leu Pro Leu Leu Ser Phe Phe Phe Ser

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100

105

&lt;210&gt; 1965

&lt;211&gt; 1416

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1965

cggctggggc aggagctgga cgacgccacc atggacctgg agcagcagcg gcagcttgtg  
60  
agcaccctgg agaagaagca gcgcaagttt gaccagcttc tggcagagga gaaggcagct  
120  
gtacttcggg cagtggagga acgtgagcgg gccgaggcag agggccggga gcgtgaggct  
180  
cgggccctgt cactgacacg ggcaactggag gaggagcagg aggcacgtga ggagctggag  
240  
cggcagaacc gggccctgcg ggctgagctg gaggcactgc tgagcagcaa ggatgacgtc  
300  
ggcaagagcg tgcattgagct ggaacgagcc tgccgggtag cagaacaggc agccaatgat  
360  
ctgcgagcac aggtgacaga actggaggat gagctgacag cggccgagga tgccaagctg  
420  
cgtctggagg tgactgtgca ggctctcaag actcagcatg agcgtgacct gcagggccgt  
480  
gatgaggctg gtgaagagag gcggaggcag ctggccaagc agctgagaga tgcagaggtg  
540  
gagcgggatg aggagcggaa gcagcgcact ctggccgtgg ctgcccgcaa gaagctggag  
600  
ggagagctgg aggagctgaa ggctcagatg gcctctgccg gccagggcaa ggaggaggcg  
660  
gtgaagcagc ttcgcaagat gcaggcccg atgaaggagc tatggcggga ggtggaggag  
720  
acacgcacct cccgggagga gatcttctcc cagaatcggg aaagtgaana gcgcctcaag  
780  
ggcctggagg ctgaggtgct gcggctgcag gaggaaactg ccgcctcgga ccgtgctcgg  
840  
cggcaggccc agcaggaccg ggatgagatg gcagatgagg tggccaatgg taaccttagc  
900  
aaggcagcca ttctggagga gaagcgtcag ctggaggggc gcctggggca gttggaggaa  
960  
gagctggagg aggagcagac anactcagag ctgctcaatg accgctaccg caagctgctc  
1020  
ctgcaggtag agtcactgac cacagagctg tcagctgagc gcagtttctc agccaaggca  
1080  
gagagcgggc ggcagcagct ggaacggcag atccaggagc tacggggacg cctgggtgag  
1140  
gaggatgctg gggcccgtgc ccgccacaag atgaccattg ctgcccttga gtctaagttg  
1200  
gcccaggctg aggagcagct agagcaagag accagagagc gcaccccttc tggaaagctg  
1260  
gtgccccaaa gtaagaagcg gtttaagag gtggtgctcc aggtggagga ggagcggagg  
1320  
gtggctgacc agctccggga ccagctggag aagggaacc ttcgagtcaa gcagctgaag  
1380

1485

cggcagctgg aggaggccga ggaggaggca tcccgg  
1416

<210> 1966

<211> 472

<212> PRT

<213> Homo sapiens

<400> 1966

Arg Leu Gly Gln Glu Leu Asp Asp Ala Thr Met Asp Leu Glu Gln Gln  
1 5 10 15  
Arg Gln Leu Val Ser Thr Leu Glu Lys Lys Gln Arg Lys Phe Asp Gln  
20 25 30  
Leu Leu Ala Glu Glu Lys Ala Ala Val Leu Arg Ala Val Glu Glu Arg  
35 40 45  
Glu Arg Ala Glu Ala Glu Gly Arg Glu Arg Glu Ala Arg Ala Leu Ser  
50 55 60  
Leu Thr Arg Ala Leu Glu Glu Gln Glu Ala Arg Glu Glu Leu Glu  
65 70 75 80  
Arg Gln Asn Arg Ala Leu Arg Ala Glu Leu Glu Ala Leu Leu Ser Ser  
85 90 95  
Lys Asp Asp Val Gly Lys Ser Val His Glu Leu Glu Arg Ala Cys Arg  
100 105 110  
Val Ala Glu Gln Ala Ala Asn Asp Leu Arg Ala Gln Val Thr Glu Leu  
115 120 125  
Glu Asp Glu Leu Thr Ala Ala Glu Asp Ala Lys Leu Arg Leu Glu Val  
130 135 140  
Thr Val Gln Ala Leu Lys Thr Gln His Glu Arg Asp Leu Gln Gly Arg  
145 150 155 160  
Asp Glu Ala Gly Glu Glu Arg Arg Arg Gln Leu Ala Lys Gln Leu Arg  
165 170 175  
Asp Ala Glu Val Glu Arg Asp Glu Glu Arg Lys Gln Arg Thr Leu Ala  
180 185 190  
Val Ala Ala Arg Lys Lys Leu Glu Gly Glu Leu Glu Glu Leu Lys Ala  
195 200 205  
Gln Met Ala Ser Ala Gly Gln Gly Lys Glu Glu Ala Val Lys Gln Leu  
210 215 220  
Arg Lys Met Gln Ala Gln Met Lys Glu Leu Trp Arg Glu Val Glu Glu  
225 230 235 240  
Thr Arg Thr Ser Arg Glu Glu Ile Phe Ser Gln Asn Arg Glu Ser Glu  
245 250 255  
Lys Arg Leu Lys Gly Leu Glu Ala Glu Val Leu Arg Leu Gln Glu Glu  
260 265 270  
Leu Ala Ala Ser Asp Arg Ala Arg Arg Gln Ala Gln Gln Asp Arg Asp  
275 280 285  
Glu Met Ala Asp Glu Val Ala Asn Gly Asn Leu Ser Lys Ala Ala Ile  
290 295 300  
Leu Glu Glu Lys Arg Gln Leu Glu Gly Arg Leu Gly Gln Leu Glu Glu  
305 310 315 320  
Glu Leu Glu Glu Glu Gln Thr Xaa Ser Glu Leu Leu Asn Asp Arg Tyr  
325 330 335  
Arg Lys Leu Leu Gln Val Glu Ser Leu Thr Thr Glu Leu Ser Ala  
340 345 350  
Glu Arg Ser Phe Ser Ala Lys Ala Glu Ser Gly Arg Gln Gln Leu Glu

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      355      360      365
Arg Gln Ile Gln Glu Leu Arg Gly Arg Leu Gly Glu Glu Asp Ala Gly
      370      375      380
Ala Arg Ala Arg His Lys Met Thr Ile Ala Ala Leu Glu Ser Lys Leu
385      390      395      400
Ala Gln Ala Glu Glu Gln Leu Glu Gln Glu Thr Arg Glu Arg Ile Leu
      405      410      415
Ser Gly Lys Leu Val Pro Lys Ser Lys Lys Arg Phe Lys Glu Val Val
      420      425      430
Leu Gln Val Glu Glu Glu Arg Arg Val Ala Asp Gln Leu Arg Asp Gln
      435      440      445
Leu Glu Lys Gly Asn Leu Arg Val Lys Gln Leu Lys Arg Gln Leu Glu
      450      455      460
Glu Ala Glu Glu Glu Ala Ser Arg
465      470

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&lt;210&gt; 1967

&lt;211&gt; 401

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1967

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aaatttgaat cctggaaagc tgatctcgat aagtcgtttg tcgagctggt tgcggcggtg
60
ccgacgcgcc taatttggat cgtgcagtaa gagcttctcc attcctcggc gccaaaggga
120
tgcacacat ctgcgggcca gtcagctccc ctgggcttgc actcgtcgga gatgctggcc
180
ttgcaccaga tctctgtgg ggcgtcgggt gtggctgggc attccagtcg gcagcttggt
240
tagtggactg taccggatct catttggtcg accggaccgc cttagatagg gcgcttcgca
300
gttatcatcg ataccaccgg cattctcttg ggtggcatga acgcctcacc tctagatatg
360
caaacggccg gggttttcat gcgctcgaga agctgatgct g
401

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&lt;210&gt; 1968

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1968

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Met His His Ile Ser Arg Pro Val Ser Ser Pro Gly Leu Ala Leu Val
 1      5      10      15
Gly Asp Ala Gly Leu Ala Pro Asp Pro Leu Trp Gly Val Gly Cys Gly
      20      25      30
Trp Ala Phe Gln Ser Ala Ala Trp Leu Val Asp Cys Thr Gly Ser His
      35      40      45
Leu Ala Asp Arg Thr Ala Leu Asp Arg Ala Leu Arg Ser Tyr His Arg
      50      55      60
Tyr His Arg His Ser Leu Gly Trp His Glu Arg Leu Ile Ser Arg Tyr
65      70      75      80
Ala Asn Gly Arg Gly Phe His Ala Leu Glu Lys Leu Met Leu

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85

90

<210> 1969  
 <211> 464  
 <212> DNA  
 <213> Homo sapiens

<400> 1969  
 nncatcgacg cgcactggac tcatctgggt gacggcccac agatggacac tctgcgcgag  
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 gaggtcgccg ttcaccgcgt cacggatgct gtcaccctgc tcggtcacgt cgccaacacc  
 120  
 cagggtcatgg cgaccacgag tgatctcaaa ccgtcagtat tcgtcaacct ctctctctcg  
 180  
 gaaggacttc ctgtatcaat gatggaggtt gcttccctcg gtatcccat tategcgact  
 240  
 ggcgtcggcg gagtaggaga aatcgtctcg tctgacaacg ggcattctatt gcctgccgag  
 300  
 ttcaccgaca cccaggcatc tgacgcgtta gtgcagctgg cacgtctgtc tgaggacgag  
 360  
 taccagcagg tgtgtcaggc ctcccgccag gtgtgggaag aaaagtccg cgctctgtc  
 420  
 gtctaccccg aattctgtcg cgagtgtgg ggcgacgctg atca  
 464

<210> 1970  
 <211> 154  
 <212> PRT  
 <213> Homo sapiens

<400> 1970  
 Xaa Ile Asp Ala His Trp Thr His Leu Gly Asp Gly Pro Gln Met Asp  
 1 5 10 15  
 Thr Leu Arg Glu Glu Val Ala Val His Arg Val Thr Asp Ala Val Thr  
 20 25 30  
 Leu Leu Gly His Val Ala Asn Thr Gln Val Met Ala Thr Gln Arg Asp  
 35 40 45  
 Leu Lys Pro Ser Val Phe Val Asn Leu Ser Ser Ser Glu Gly Leu Pro  
 50 55 60  
 Val Ser Met Met Glu Val Ala Ser Leu Gly Ile Pro Ile Ile Ala Thr  
 65 70 75 80  
 Gly Val Gly Gly Val Gly Glu Ile Val Ser Ser Asp Asn Gly His Leu  
 85 90 95  
 Leu Pro Ala Glu Phe Thr Asp Thr Gln Ala Ser Asp Ala Leu Val Gln  
 100 105 110  
 Leu Ala Arg Leu Ser Glu Asp Glu Tyr Gln Gln Val Cys Gln Ala Ser  
 115 120 125  
 Arg Gln Val Trp Glu Glu Lys Phe Arg Ala Ser Val Val Tyr Pro Glu  
 130 135 140  
 Phe Cys Arg Glu Cys Trp Gly Asp Ala Asp  
 145 150

<210> 1971  
 <211> 520



<212> DNA

<213> Homo sapiens

<400> 1971

accggttgta ggtgtacaaa cactgctgac atcagccagc tcctgagtgt caggagagac  
60  
acagaagtac tcaggttggt tgtgtgttga ccgagagAAC agctcagatt gaggaacgag  
120  
acagacgacg acaaaaacaa ttagagcatc agttgatata atacaaatgg aatataatgc  
180  
atctaacatt tcaaattcaa gacatgattc tgatgaaatc agtggtaaaa tgaatacata  
240  
tatgaattct acgacttcta agaaggatac tgggtgtgcaa acagatgact taaatatagg  
300  
aatattcacc aatgcagaat cacattgtgg atcattaatg gagagggaca tcacaaattg  
360  
ttcatctcct gagatttcgg cagaacttat tggacagttt agcaccaaga aaaacaagca  
420  
agaactaact caggataaag gagccagctt agaaaaagaa aacaatcggg gtaatgacca  
480  
gtgtaatcag ttcacaagaa ttgagaaaca acaaaaacag  
520

<210> 1972

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1972

Met	Glu	Tyr	Asn	Ala	Ser	Asn	Ile	Ser	Asn	Ser	Arg	His	Asp	Ser	Asp
1				5					10					15	
Glu	Ile	Ser	Gly	Lys	Met	Asn	Thr	Tyr	Met	Asn	Ser	Thr	Thr	Ser	Lys
			20					25					30		
Lys	Asp	Thr	Gly	Val	Gln	Thr	Asp	Asp	Leu	Asn	Ile	Gly	Ile	Phe	Thr
			35				40					45			
Asn	Ala	Glu	Ser	His	Cys	Gly	Ser	Leu	Met	Glu	Arg	Asp	Ile	Thr	Asn
			50			55				60					
Cys	Ser	Ser	Pro	Glu	Ile	Ser	Ala	Glu	Leu	Ile	Gly	Gln	Phe	Ser	Thr
65					70				75					80	
Lys	Lys	Asn	Lys	Gln	Glu	Leu	Thr	Gln	Asp	Lys	Gly	Ala	Ser	Leu	Glu
			85					90						95	
Lys	Glu	Asn	Asn	Arg	Cys	Asn	Asp	Gln	Cys	Asn	Gln	Phe	Thr	Arg	Ile
			100					105						110	
Glu	Lys	Gln	Thr	Lys	Gln										
															115

<210> 1973

<211> 331

<212> DNA

<213> Homo sapiens

<400> 1973

acgcgtacct atgcccagcg catggcggat cagttgaccg cggcactagg cagctactta  
60

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120  
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cccgtcgcgc ctttctccgc ttggggcgtg cgcggaacga ctttttctgc gccgtcgcgc  
240  
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331

<210> 1974  
<211> 103  
<212> PRT  
<213> Homo sapiens

<400> 1974  
Met Ala Asp Gln Leu Thr Ala Ala Leu Gly Ser Tyr Leu Ser Ala Gly  
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Gln Lys Lys Ser Asp Gly Leu Gly Ser Phe Phe Val Ala Thr Thr Leu  
20 25 30  
Glu Glu Leu Gln Ala Met Asn Ser Asp Thr Arg Phe Thr Thr Ser Val  
35 40 45  
Gly Ile Asp Leu Ser Pro Ala Arg Ser Phe Ser Ala Trp Ala Leu Arg  
50 55 60  
Gly Thr Thr Phe Ser Ala Pro Ser Met Thr Lys Ala Ser Arg Ser Ser  
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<210> 1975  
<211> 370  
<212> DNA  
<213> Homo sapiens

<400> 1975  
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370

<210> 1976

<211> 121  
<212> PRT  
<213> Homo sapiens

<400> 1976  
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Arg Leu Arg Gly Gly Leu His Gln Ser Arg Asn Leu Gly Asp Arg Val  
35 40 45  
Val Gly Val Gly Leu Cys Leu Arg Arg Asp Val Ala Arg Ser Leu Arg  
50 55 60  
Gln Arg Ile Ala Asn Leu Leu Leu Thr Ala Arg Arg Val Gly Thr Arg  
65 70 75 80  
Leu Leu Pro Arg Leu Ala Gln Leu Gly Ala His Cys Thr Gln Arg Ile  
85 90 95  
Gly Pro Ser Arg Gln Thr Leu Leu Val Ala Gly Leu Gln Arg Gly Leu  
100 105 110  
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<210> 1977  
<211> 551  
<212> DNA  
<213> Homo sapiens

<400> 1977  
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180  
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240  
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360  
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420  
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551

<210> 1978  
<211> 101  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 1978

Met His Pro Trp His Pro Thr Ser Ser Gly Ile Cys Leu Leu Val Ser  
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 20 25 30  
 Pro Leu Pro Ala Val Ser Pro Thr Ser Phe Ile Pro Pro Val Thr Arg  
 35 40 45  
 Glu Val Gln Ile Phe Gln Pro Gly His Cys Leu Pro Ser Arg Leu Ala  
 50 55 60  
 Pro Pro Val His Leu Leu Cys Ser Ser Leu Cys Asn Ser Leu Ala Ala  
 65 70 75 80  
 Cys Leu Leu Ser Pro Leu Thr Gln Leu Leu Thr Cys Pro Thr Pro Ala  
 85 90 95  
 Gln Pro Thr Ser Ser  
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&lt;210&gt; 1979

&lt;211&gt; 5530

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1979

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 360  
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 420  
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1980  
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aaaaaaaaa  
5530

&lt;210&gt; 1980

&lt;211&gt; 929

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1980

Met Leu Leu Gly Trp Ala Ser Leu Leu Leu Cys Ala Phe Arg Leu Pro

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Leu Ala Ala Val Gly Pro Ala Ala Thr Pro Ala Gln Asp Lys Ala Gly			
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Gln Pro Pro Thr Ala Ala Ala Ala Ala Gln Pro Arg Arg Arg Gln Gly			
35	40	45	
Glu Glu Val Gln Glu Arg Ala Glu Pro Pro Gly His Pro His Pro Leu			
50	55	60	
Ala Gln Arg Arg Arg Ser Lys Gly Leu Val Gln Asn Ile Asp Gln Leu			
65	70	75	80
Tyr Ser Gly Gly Gly Lys Val Gly Tyr Leu Val Tyr Ala Gly Gly Arg			
85	90	95	
Arg Phe Leu Leu Asp Leu Glu Arg Asp Gly Ser Val Gly Ile Ala Gly			
100	105	110	
Phe Val Pro Ala Gly Gly Gly Thr Ser Ala Pro Trp Arg His Arg Ser			
115	120	125	
His Cys Phe Tyr Arg Gly Thr Val Asp Ala Ser Pro Arg Ser Leu Ala			
130	135	140	
Val Phe Asp Leu Cys Gly Gly Leu Asp Gly Phe Phe Ala Val Lys His			
145	150	155	160
Ala Arg Tyr Thr Leu Lys Pro Leu Leu Arg Gly Pro Trp Ala Glu Glu			
165	170	175	
Glu Lys Gly Arg Val Tyr Gly Asp Gly Ser Ala Arg Ile Leu His Val			
180	185	190	
Tyr Thr Arg Arg Ala Ser Ala Ser Arg Pro Cys Arg Arg Ala Pro Ala			
195	200	205	
Ala Lys Pro Pro Arg Pro His Arg Arg Pro Thr Ser Met Leu Arg Arg			
210	215	220	
Thr Ala Thr Arg Ala Asp Ala Gln His Ala Ser Gln Leu Leu Asp Gln			
225	230	235	240
Ser Ala Leu Ser Pro Ala Gly Gly Ser Gly Pro Gln Thr Trp Trp Arg			
245	250	255	
Arg Arg Arg Arg Ser Ile Ser Arg Ala Arg Gln Val Glu Leu Leu Leu			
260	265	270	
Val Ala Asp Ala Ser Met Ala Arg Leu Tyr Gly Arg Gly Leu Gln His			
275	280	285	
Tyr Leu Leu Thr Leu Ala Ser Ile Ala Asn Arg Leu Tyr Ser His Ala			
290	295	300	
Ser Ile Glu Asn His Ile Arg Leu Ala Val Val Lys Val Val Val Leu			
305	310	315	320
Gly Asp Lys Asp Lys Ser Leu Glu Val Ser Lys Asn Ala Ala Thr Thr			
325	330	335	
Leu Lys Asn Phe Cys Lys Trp Gln His Gln His Asn Gln Leu Gly Asp			
340	345	350	
Asp His Glu Glu His Tyr Asp Ala Ala Ile Leu Phe Thr Arg Glu Asp			
355	360	365	
Leu Cys Gly His His Ser Cys Asp Thr Leu Gly Met Ala Asp Val Gly			
370	375	380	
Thr Ile Cys Ser Pro Glu Arg Ser Cys Ala Val Ile Glu Asp Asp Gly			
385	390	395	400
Leu His Ala Ala Phe Thr Val Ala His Glu Ile Gly His Leu Leu Gly			
405	410	415	
Leu Ser His Asp Asp Ser Lys Phe Cys Glu Glu Thr Phe Gly Ser Thr			
420	425	430	
Glu Asp Lys Arg Leu Met Ser Ser Ile Leu Thr Ser Ile Asp Ala Ser			



435	440	445
Lys Pro Trp Ser Lys Cys Thr Ser Ala Thr Ile Thr Glu Phe Leu Asp		
450	455	460
Asp Gly His Gly Asn Cys Leu Leu Asp Leu Pro Arg Lys Gln Ile Leu		
465	470	475
Gly Pro Glu Glu Leu Pro Gly Gln Thr Tyr Asp Ala Thr Gln Gln Cys		480
485	490	495
Asn Leu Thr Phe Gly Pro Glu Tyr Ser Val Cys Pro Gly Met Asp Val		
500	505	510
Cys Ala Arg Leu Trp Cys Ala Val Val Arg Gln Gly Gln Met Val Cys		
515	520	525
Leu Thr Lys Lys Leu Pro Ala Val Glu Gly Thr Pro Cys Gly Lys Gly		
530	535	540
Arg Ile Cys Leu Gln Gly Lys Cys Val Asp Lys Thr Lys Lys Lys Tyr		
545	550	555
Tyr Ser Thr Ser Ser His Gly Asn Trp Gly Ser Trp Gly Ser Trp Gly		
565	570	575
Gln Cys Ser Arg Ser Cys Gly Gly Gly Val Gln Phe Ala Tyr Arg His		
580	585	590
Cys Asn Asn Pro Ala Pro Arg Asn Asn Gly Arg Tyr Cys Thr Gly Lys		
595	600	605
Arg Ala Ile Tyr His Ser Cys Ser Leu Met Pro Cys Pro Pro Asn Gly		
610	615	620
Lys Ser Phe Arg His Glu Gln Cys Glu Ala Lys Asn Gly Tyr Gln Ser		
625	630	635
Asp Ala Lys Gly Val Lys Thr Phe Val Glu Trp Val Pro Lys Tyr Ala		
645	650	655
Gly Val Leu Pro Ala Asp Val Cys Lys Leu Thr Cys Arg Ala Lys Gly		
660	665	670
Thr Gly Tyr Tyr Val Val Phe Ser Pro Lys Val Thr Asp Gly Thr Glu		
675	680	685
Cys Arg Pro Tyr Ser Asn Ser Val Cys Val Arg Gly Lys Cys Val Arg		
690	695	700
Thr Gly Cys Asp Gly Ile Ile Gly Ser Lys Leu Gln Tyr Asp Lys Cys		
705	710	715
Gly Val Cys Gly Gly Asp Asn Ser Ser Cys Thr Lys Ile Val Gly Thr		
725	730	735
Phe Asn Lys Lys Ser Lys Gly Tyr Thr Asp Val Val Arg Ile Pro Glu		
740	745	750
Gly Ala Thr His Ile Lys Val Arg Gln Phe Lys Ala Lys Asp Gln Thr		
755	760	765
Arg Phe Thr Ala Tyr Leu Ala Leu Lys Lys Lys Asn Gly Glu Tyr Leu		
770	775	780
Ile Asn Gly Lys Tyr Met Ile Ser Thr Ser Glu Thr Ile Ile Asp Ile		
785	790	795
Asn Gly Thr Val Met Asn Tyr Ser Gly Trp Ser His Arg Asp Asp Phe		
805	810	815
Leu His Gly Met Gly Tyr Ser Ala Thr Lys Glu Ile Leu Ile Val Gln		
820	825	830
Ile Leu Ala Thr Asp Pro Thr Lys Pro Leu Asp Val Arg Tyr Ser Phe		
835	840	845
Phe Val Pro Lys Lys Ser Thr Pro Lys Val Asn Ser Val Thr Ser His		
850	855	860
Gly Ser Asn Lys Val Gly Ser His Thr Ser Gln Pro Gln Trp Val Thr		

865                      870                      875                      880  
Gly Pro Trp Leu Ala Cys Ser Arg Thr Cys Asp Thr Gly Trp His Thr  
                         885                      890                      895  
Arg Thr Val Gln Cys Gln Asp Gly Asn Arg Lys Leu Ala Lys Gly Cys  
                         900                      905                      910  
Pro Leu Ser Gln Arg Pro Ser Ala Phe Lys Gln Cys Leu Leu Lys Lys  
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Cys

<210> 1981  
<211> 327  
<212> DNA  
<213> Homo sapiens

<400> 1981  
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327

<210> 1982  
<211> 107  
<212> PRT  
<213> Homo sapiens

<400> 1982  
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20                      25                      30  
Gly Val Asn Pro Arg Gly Val Asp Asn Arg Thr Ser Met Ala Val Phe  
35                      40                      45  
Ser Pro Pro Lys Ala Ala Gly Gly Gly Arg Cys Pro Gly Pro Cys Arg  
50                      55                      60  
Ile Met Ala Trp Pro Gly Gln Arg Ala Ser Ser Ser Gly Arg Gly Arg  
65                      70                      75                      80  
Gly Pro Ala Leu Ser Glu Trp Ala Ser Cys Leu Asn Gly Ser Lys Val  
85                      90                      95  
Arg Ala Gly Ser Pro Gly Ser Glu Ala Asp Ala  
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<210> 1983  
<211> 383  
<212> DNA  
<213> Homo sapiens

&lt;400&gt; 1983

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 300  
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 383

&lt;210&gt; 1984

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1984

Phe	Asn	Asn	Met	Val	His	Glu	Leu	Arg	Glu	Gln	Gln	His	Ile	Lys	Asp
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Leu	Phe	Arg	Gln	His	Val	Gly	Ser	Lys	Ile	Ala	Asp	Gln	Ala	Leu	Ser
			20					25					30		
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Pro	Ala	Ser	Arg	Leu	Asp	Asp	Glu	Asp	Gly	Asp	Phe	Gln	Pro	Gln	Glu
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			100					105					110		
Glu	Gly	Asn	Asp	Ala	Glu	Ala	Gln	Arg	Arg	Glu	Ile	Glu	Leu	Leu	Arg
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Arg	Glu	Gly	Glu	Leu	Pro	Leu	Glu	Glu	Leu	Leu	Arg	Ser	Leu	Pro	Pro
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Pro	Gln	Val	Leu	Glu	Ile	Lys	Pro	Pro	Pro	Ser	Ala	Val	Thr	Gln	Arg
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Gly Tyr Thr Leu Ala Thr Thr Gln Val Lys Thr Pro Ile Pro Leu Leu		
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Cys Glu Lys Gly Asn Trp Gly Pro His Leu Ile Ile Val Pro Thr Ser		
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Gln Gly Trp Thr Lys Pro Asn Ala Phe His Val Cys Ile Thr Ser Tyr		
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Tyr Leu Ile Leu Asp Glu Ala Gln Asn Ile Lys Asn Phe Lys Ser Gln		
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Asp Asp Phe Met Ala Gln Thr Thr Thr Lys Glu Thr Leu Ala Thr Gly		
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Asn His Pro Asn Leu Phe Asp Pro Arg Pro Val Thr Ser Pro Phe Ile		
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Thr Pro Gly Ile Cys Phe Ser Thr Ala Ser Leu Val Leu Arg Ala Thr		

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Pro Leu His Arg Ile Val Cys Asn Met Arg Thr Gln Phe Pro Asp Leu			
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Arg Leu Ile Gln Tyr Asp Cys Gly Lys Leu Gln Thr Leu Ala Val Leu			
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Ala Gln Asp Arg Cys His Arg Ile Gly Gln Thr Arg Asp Val His Ile			
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Tyr Arg Leu Ile Ser Glu Arg Thr Val Glu Glu Asn Ile Leu Lys Lys			
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Gly Phe Pro Ala Gly Glu Gly Glu Glu Ala Gly Arg Pro Gly Ala Glu			



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Thr	Ser	Ser	Pro	Glu	Gly	Pro	Ser	Pro	Ala	Arg	Pro	Pro	Arg	Arg	Arg

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Pro Ile Gly Gly Pro Cys Glu Ala Ala Pro Ser Ser Ser Leu Pro Thr		2540
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<210> 1992

<211> 733

<212> PRT

<213> Homo sapiens

<400> 1992

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Arg	Ile	Pro	Gly	Gly	Tyr	Val	Thr	Asn	His	Ile	Tyr	Thr	Trp	Val	Asp
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Pro	Gln	Gly	Arg	Ser	Ile	Ser	Pro	Pro	Ser	Gly	Leu	Pro	Gln	Pro	His
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Gly	Gly	Ala	Leu	Arg	Gln	Gln	Glu	Gly	Asp	Arg	Arg	Ser	Thr	Leu	His
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Gly	Ile	Tyr	Ile	Thr	Gly	Val	Asp	Pro	Gly	Ser	Glu	Ala	Glu	Gly	Ser
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Leu	Asn	Ile	Leu	His	Asp	Glu	Ala	Val	Arg	Leu	Leu	Lys	Ser	Ser	Arg
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His	Leu	Ile	Leu	Thr	Val	Lys	Asp	Val	Gly	Arg	Leu	Pro	His	Ala	Arg
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Thr	Thr	Val	Asp	Glu	Thr	Lys	Trp	Ile	Ala	Ser	Ser	Arg	Ile	Arg	Glu
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Thr	Met	Ala	Asn	Ser	Ala	Gly	Phe	Leu	Gly	Asp	Leu	Thr	Thr	Glu	Gly
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Arg	His	Leu	Leu	Asn	Glu	Gln	Glu	His	Thr	Thr	Met	Ala	Tyr	Tyr	Leu

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290 295 300  
Val Arg Gly Thr Ile Ser Pro Gln Asp Leu Glu Arg Phe Asp His Leu  
305 310 315 320  
Val Leu Arg Arg Glu Ile Glu Ser Met Lys Ala Arg Gln Pro Pro Gly  
325 330 335  
Pro Gly Ala Gly Asp Thr Tyr Ser Met Val Ser Tyr Ser Asp Thr Gly  
340 345 350  
Ser Ser Thr Gly Ser His Gly Thr Ser Thr Thr Val Ser Ser Ala Arg  
355 360 365  
Asn Thr Leu Asp Leu Glu Glu Thr Gly Glu Ala Val Gln Gly Asn Ile  
370 375 380  
Asn Ala Leu Pro Asp Val Ser Val Asp Asp Val Arg Ser Thr Ser Gln  
385 390 395 400  
Gly Leu Ser Ser Phe Lys Pro Leu Pro Arg Pro Pro Pro Leu Ala Gln  
405 410 415  
Gly Asn Asp Leu Pro Leu Gly Gln Pro Arg Lys Leu Gly Arg Glu Asp  
420 425 430  
Leu Gln Pro Pro Ser Ser Met Pro Ser Cys Ser Gly Thr Val Phe Ser  
435 440 445  
Ala Pro Gln Asn Arg Ser Pro Pro Ala Gly Thr Ala Pro Thr Pro Gly  
450 455 460  
Thr Ser Ser Ala Gln Asp Leu Pro Ser Ser Pro Ile Tyr Ala Ser Val  
465 470 475 480  
Ser Pro Ala Asn Pro Ser Ser Lys Arg Pro Leu Asp Ala His Leu Ala  
485 490 495  
Leu Val Asn Gln His Pro Ile Gly Pro Phe Pro Arg Val Gln Ser Pro  
500 505 510  
Pro His Leu Lys Ser Pro Ser Ala Glu Ala Thr Val Ala Gly Gly Cys  
515 520 525  
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Gln His Phe Val Met Val Glu Val His Arg Pro Asp Ser Glu Pro Asp  
545 550 555 560  
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580 585 590  
Asp Ala Gly Glu Ala Glu Ala Ser Ala Pro Gly Arg Gly Arg Gln Ser  
595 600 605  
Val Ser Thr Lys Ser Arg Ser Ser Lys Glu Leu Pro Arg Asn Glu Arg  
610 615 620  
Pro Thr Asp Gly Ala Asn Lys Pro Pro Gly Leu Leu Glu Pro Thr Ser  
625 630 635 640  
Thr Leu Val Arg Val Lys Lys Ser Ala Ala Thr Leu Gly Ile Ala Ile  
645 650 655  
Glu Gly Gly Ala Asn Thr Arg Gln Pro Leu Pro Arg Ile Val Thr Ile  
660 665 670  
Gln Arg Gly Gly Ser Ala His Asn Cys Gly Gln Leu Lys Val Gly His  
675 680 685  
Val Ile Leu Glu Val Asn Gly Leu Thr Leu Arg Gly Lys Glu His Arg

690	695	700
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<210> 1993  
 <211> 957  
 <212> DNA  
 <213> Homo sapiens

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<210> 1994  
 <211> 224  
 <212> PRT  
 <213> Homo sapiens

<400> 1994  
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Lys Thr Thr Leu Leu His Cys Leu Ser Gly Ile Leu Ser Pro Asp Ser
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      50      55      60
Leu Ser Asn Glu Gly Arg Ala Lys Leu Arg Arg Gln Ser Leu Gly Phe
65      70      75      80
Val Phe Gln Gln Gly Met Leu Val Pro Glu Leu Thr Ala Val Glu Asn
      85      90      95
Thr Ala Leu Pro Leu Met Leu Asn Gly Val Ser Gln Thr Asp Ala Val
      100      105      110
Arg Tyr Ala Thr Gln Trp Leu Glu Ser Met Gly Leu Gly Gly Met Glu
      115      120      125
Asp Arg Arg Ile Gly Gln Leu Ser Gly Gly Gln Ala Gln Arg Val Thr
      130      135      140
Ile Ala Arg Ser Gln Val Ile Asp Pro Ser Ile Val Phe Ala Asp Glu
145      150      155      160
Pro Thr Gly Ala Leu Asp Ser Ala Thr Ala Val Glu Val Met Ala Ile
      165      170      175
Leu Leu Ser Ala Thr Thr Gly Arg Gly Arg Thr Leu Val Val Val Thr
      180      185      190
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<210> 1995  
 <211> 285  
 <212> DNA  
 <213> Homo sapiens

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180
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285

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<210> 1996  
 <211> 59  
 <212> PRT  
 <213> Homo sapiens

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<400> 1996
His His His His Tyr Gln His His His His His His Tyr His Leu Tyr
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<210> 1997  
<211> 313  
<212> DNA  
<213> Homo sapiens

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313

<210> 1998  
<211> 104  
<212> PRT  
<213> Homo sapiens

<400> 1998  
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Glu Met Leu Val Gly Leu Ala Ile Gly Gly Gly Ile Gly Phe Tyr Asp  
35 40 45  
Gly Leu Phe Gly Pro Gly Thr Gly Ser Phe Leu Met Phe Leu Phe Val  
50 55 60  
Arg Phe Leu Arg Phe Asp Phe Leu His Ala Ser Ala Ala Lys Val  
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<210> 1999  
<211> 399  
<212> DNA  
<213> Homo sapiens

<400> 1999  
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ggaagaatgg atcttactct cgctgaccct gagattgtcg ttaacaatgg cgatgatcat  
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<210> 2000

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2000

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Asp	His	Val	Ile	Met	Ser	Val	Lys	Ser	Lys	Thr	Met	Val	Gly	Gln	Leu
		20					25					30			
Val	Asp	Tyr	Gly	Arg	Ile	Thr	Phe	Val	Asp	Met	Thr	Gly	Ser	Ile	Thr
	35					40					45				
Gln	Gly	Gln	Asn	Asp	Ala	Ala	Gln	Val	Val	Gly	Thr	Asn	Val	Lys	Leu
	50				55					60					
Asn	Ser	Gln	Ala	Val	Asp	Ala	Phe	Ala	Gly	Phe	Tyr	Gln	Ala	Gly	Lys
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Pro	Met	Asp	Asp	Ile	Asp	Ser	Ser	Leu	Lys	Leu					
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<210> 2001

<211> 1434

<212> DNA

<213> Homo sapiens

<400> 2001

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 ttggtgactg ctggggcagg tgtcaacgag gccgactgta aaggctgctc tcccctccac  
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 420  
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1434

&lt;210&gt; 2002

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2002

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Arg	Arg	Asp	Lys	Phe	Gly	Arg	Thr	Pro	Leu	His	Tyr	Ala	Ala	Ala	Asn
			20					25					30		
Gly	Ser	Tyr	Gln	Cys	Ala	Val	Thr	Leu	Val	Thr	Ala	Gly	Ala	Gly	Val
			35				40					45			
Asn	Glu	Ala	Asp	Cys	Lys	Gly	Cys	Ser	Pro	Leu	His	Tyr	Ala	Ala	Ala
	50					55				60					
Ser	Asp	Thr	Tyr	Arg	Xaa	Ser	Gly	Thr	Pro	Tyr	Thr	Phe	Gln	Pro	
65					70					75					

&lt;210&gt; 2003

&lt;211&gt; 688

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2003

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 688

&lt;210&gt; 2004

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2004

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Phe	Ser	Asp	Val	Ile	Ala	Asp	Thr	Ile	Lys	Glu	Leu	Gln	Asp	Ser	Ala
			20					25					30		
Thr	Tyr	Asn	Ser	Leu	Leu	Gln	Ala	Leu	Ser	Lys	Glu	Arg	Glu	Asn	Lys
			35				40						45		
Met	His	Phe	Tyr	Asp	Ile	Ile	Ser	Arg	Glu	Glu	Lys	Gly	Arg	Lys	Gln
			50				55					60			
Ile	Ile	Ser	Leu	Gln	Lys	Gln	Leu	Ile	Asn	Phe	Lys	Lys	Glu	Trp	Gln
65					70					75				80	
Phe	Glu	Val	Gln	Ser	Gln	Asn	Glu	Tyr	Ile	Ala	Asn	Leu	Lys	Asp	Gln
			85							90				95	
Leu	Gln	Glu	Met	Lys	Ala	Lys	Ser	Asn	Leu	Glu	Asn	Arg	Tyr	Met	Lys
			100					105					110		
Thr	Asn	Thr	Glu	Leu	Gln	Ile	Ala	Gln	Thr	Gln	Lys	Lys	Cys	Asn	Arg
			115				120						125		
Thr	Glu	Glu	Leu	Leu	Val	Glu	Glu	Ile	Glu	Lys	Leu	Arg	Met	Lys	Thr
			130				135					140			
Glu	Glu	Glu	Ala	Arg	Thr	His	Thr	Glu	Ile	Glu	Met	Phe	Leu	Arg	Lys
145					150					155				160	
Glu	Gln	Gln	Val	Gly	Pro	His	Ser	Phe	Ser	Met	Leu				
			165							170					

<210> 2005  
<211> 354  
<212> DNA  
<213> Homo sapiens

<400> 2005  
gctagcacca agccaagggt atgtttcctt gcttgcattg ggggtttctg gccagtcagc  
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caagtgaact gattgacccc cagccctgtg ggggaatttca ggggggtatt gtcttgggtca  
120  
tcggagtcag ggggtggcctt tnagccaagg ctgcattaac ttttgggaaa agaaatggga  
180  
agcccgccgt gtcacagggt ctcttgaccg gctgggtagg gtttggcctt atcttacagc  
240  
cagtgtgtg tttgtcaga tggacgcaca tggaaaccag gctaggatca tcttcccaat  
300  
gtctactccc tgctttgggc tgtcctgaaa acaattgcaa agacattgtg gctg  
354

<210> 2006  
<211> 111  
<212> PRT  
<213> Homo sapiens

<400> 2006  
Met Phe Pro Cys Leu His Val Gly Phe Leu Ala Ser Gln Pro Ser Glu  
1 5 10 15  
Leu Ile Asp Pro Gln Pro Cys Gly Glu Phe Gln Gly Gly Ile Val Leu  
20 25 30  
Val Ile Gly Val Arg Gly Gly Leu Xaa Ala Lys Ala Ala Leu Thr Phe  
35 40 45  
Gly Lys Arg Asn Gly Lys Pro Ala Val Ser Gln Gly Leu Leu Thr Gly  
50 55 60  
Trp Val Gly Phe Gly Leu Ile Leu Gln Pro Val Leu Cys Leu Leu Arg  
65 70 75 80  
Trp Thr His Met Glu Thr Arg Leu Gly Ser Ser Ser Gln Cys Leu Leu  
85 90 95  
Pro Ala Leu Val Cys Pro Glu Asn Asn Cys Lys Asp Ile Val Ala  
100 105 110

<210> 2007  
<211> 335  
<212> DNA  
<213> Homo sapiens

<400> 2007  
nnacgcgtgc catgtgcatg tgtatatgca tgtatgtgcg tatgtgtgtg catgtgtgtg  
60  
tgtatatgca tgtgtgtatg tgcattgtacg tgttngtgca tatgcgtgtg catgcatgcg  
120  
tgtgcgtatg tgtgcatann catgtgcaca catgtacaca cgtgtacatg ttcattcatg  
180  
tgcacgtgca tatgtgtaca cgtgtatgcg tgtacatgta tgagcatatg tacacgtgtg  
240

gatgtgtgtg tatgcatgtg tgtgtgcaca gatatgcctt ttcctttcat acaggctggg  
300  
ttgagtattg ctggtaggca gggacaactt tccgt  
335

<210> 2008  
<211> 111  
<212> PRT  
<213> Homo sapiens

<400> 2008  
Xaa Arg Val Pro Cys Ala Cys Val Tyr Ala Cys Met Cys Val Cys Val  
1 5 10 15  
Cys Met Cys Val Cys Ile Cys Met Cys Val Cys Ala Cys Thr Cys Xaa  
20 25 30  
Cys Ile Cys Val Cys Met His Ala Cys Ala Tyr Val Cys Ile Xaa Met  
35 40 45  
Cys Thr His Val His Thr Cys Thr Cys Ser Cys Met Cys Thr Cys Ile  
50 55 60  
Cys Val His Val Tyr Ala Cys Thr Cys Met Ser Ile Cys Thr Arg Val  
65 70 75 80  
Asp Val Cys Val Cys Met Cys Val Cys Thr Asp Met Pro Phe Pro Phe  
85 90 95  
Ile Gln Ala Gly Leu Ser Ile Ala Gly Arg Gln Gly Gln Leu Ser  
100 105 110

<210> 2009  
<211> 288  
<212> DNA  
<213> Homo sapiens

<400> 2009  
gacatcaccc cgctgctggc caacccaac ggtttctccg cagcgatcga ggaactggg  
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ctgcgttccc cacgcgacat cgacgtgggc gtcggcatgg aggctcgagg cttectcttc  
120  
gcagctccgg tcgccctggc catcggggca ggattcgtgc cgggtgcgcaa gccggggaag  
180  
ctccccggcc aggtgtattc cgagaccttt gccatggagt acggggagga gaccctcacc  
240  
gtccaccagt acgcatcaa gccgggggtcg cgcgtcatca tcgtcgac  
288

<210> 2010  
<211> 96  
<212> PRT  
<213> Homo sapiens

<400> 2010  
Asp Ile Thr Pro Leu Leu Ala Asn Pro Asn Gly Phe Ser Ala Ala Ile  
1 5 10 15  
Glu Glu Leu Val Leu Arg Ser Pro Arg Asp Ile Asp Val Val Val Gly  
20 25 30  
Met Glu Ala Arg Gly Phe Leu Phe Ala Ala Pro Val Ala Leu Ala Ile

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<210> 2011
<211> 384
<212> DNA
<213> Homo sapiens
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<210> 2012
<211> 123
<212> PRT
<213> Homo sapiens
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<210> 2013  
<211> 309

<212> DNA  
<213> Homo sapiens

<400> 2013  
gcgtatcccc acggctacgg catgaccgcg cttatcggcc cggacctgtc caccgtcgaa  
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gccttgctcg cccaggtcca cagcacacaa accccggtgt acctggccaa tatcaatgcc  
120  
gataaccaga cggttatcgc gggcagcgac ggggcaatga aagcagtcgc caatctggtc  
180  
cgcggaacg gcgtcgccaa acgcttggtc gtcagcgtgc cgtcccattg tgcgtgctg  
240  
gaaaaacctg ccgaaacact ggcccaagcc ttcgctgaag tgacgtgaa aacgccgncn  
300  
nnnccnncn  
309

<210> 2014  
<211> 103  
<212> PRT  
<213> Homo sapiens

<400> 2014  
Ala Tyr Pro His Gly Tyr Gly Met Thr Ala Leu Ile Gly Pro Asp Leu  
1 5 10 15  
Ser Thr Val Glu Ala Leu Leu Ala Gln Val His Ser Thr Gln Thr Pro  
20 25 30  
Val Tyr Leu Ala Asn Ile Asn Ala Asp Asn Gln Thr Val Ile Ala Gly  
35 40 45  
Ser Asp Gly Ala Met Lys Ala Val Ala Asn Leu Val Arg Gly Asn Gly  
50 55 60  
Val Ala Lys Arg Leu Ala Val Ser Val Pro Ser His Cys Ala Leu Leu  
65 70 75 80  
Glu Lys Pro Ala Glu Thr Leu Ala Gln Ala Phe Ala Glu Val Thr Leu  
85 90 95  
Lys Thr Pro Xaa Xaa Pro Xaa  
100

<210> 2015  
<211> 329  
<212> DNA  
<213> Homo sapiens

<400> 2015  
acgcgtgcca tgctcggat ccgcgcggcc caccctgtct ttgggaccgg cgagttcacc  
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120  
gtcctgtgcc tggctaattc ctccgatact gagcggacgg ttgcccttca ccttccacaa  
180  
ttcgcgggcg tggcgggctc ttctctctat catggtcagg acgcgcaacc agtaaaagct  
240  
gacggaacac tgcctgtacc gttgtggcca tatggctatc gatggctgca gatgtccggt  
300



gaggagaggt catgaccgct tgggaagac  
329

<210> 2016  
<211> 104  
<212> PRT  
<213> Homo sapiens

<400> 2016  
Thr Arg Ala Met Leu Gly Ile Arg Arg His His Pro Val Phe Gly Thr  
1 5 10 15  
Gly Glu Phe Thr Asp Leu Gly Gly Pro Asp Met Ala Val Met Ser Phe  
20 25 30  
Leu Arg His Asn Glu His Glu Thr Val Leu Cys Leu Ala Asn Leu Ser  
35 40 45  
Asp Thr Glu Arg Thr Val Ala Leu His Leu Pro Gln Phe Ala Gly Val  
50 55 60  
Ala Gly Ser Ser Leu Ile His Gly Gln Asp Ala Gln Pro Val Lys Ala  
65 70 75 80  
Asp Gly Thr Leu Ser Val Pro Leu Trp Pro Tyr Gly Tyr Arg Trp Leu  
85 90 95  
Gln Met Ser Gly Glu Glu Arg Ser  
100

<210> 2017  
<211> 457  
<212> DNA  
<213> Homo sapiens

<400> 2017  
accaaggtca gattcatggc ctcttttcct ccagcggcca gcaggaaacg cggggagccc  
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ttgatcatct ccgacatcaa gaaaggcagc gtggcacaca ggacgggcac cctggagcca  
120  
ggcgacaagc tactggccat tgacaatatc cgcttgaca actgccccat ggaggacgcc  
180  
gtgcaaatcc tgcggcagtg cgaggacctg gtgaagctga agatccggaa ggacgaggac  
240  
aactctgatg agctggagac cacagggtgcc gtcagttaca cagtggagct gaagcgctac  
300  
gggggtcccc tgggcatcac catttcgggc acggaggaac cttttgacct cattttcatc  
360  
tcaggcctcc ccaaactgtg cctggctgag aggactggtg ccatccagtg ggggaaccgc  
420  
ttcggaccat aacaacgtta ttctcaggga cggacca  
457

<210> 2018  
<211> 143  
<212> PRT  
<213> Homo sapiens

<400> 2018  
Thr Lys Val Arg Phe Met Ala Ser Phe Pro Pro Ala Ala Ser Arg Lys

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      1           5           10           15
Arg Gly Glu Pro Leu Ile Ile Ser Asp Ile Lys Lys Gly Ser Val Ala
      20           25           30
His Arg Thr Gly Thr Leu Glu Pro Gly Asp Lys Leu Leu Ala Ile Asp
      35           40           45
Asn Ile Arg Leu Asp Asn Cys Pro Met Glu Asp Ala Val Gln Ile Leu
      50           55           60
Arg Gln Cys Glu Asp Leu Val Lys Leu Lys Ile Arg Lys Asp Glu Asp
      65           70           75           80
Asn Ser Asp Glu Leu Glu Thr Thr Gly Ala Val Ser Tyr Thr Val Glu
      85           90           95
Leu Lys Arg Tyr Gly Gly Pro Leu Gly Ile Thr Ile Ser Gly Thr Glu
      100          105          110
Glu Pro Phe Asp Pro Ile Phe Ile Ser Gly Leu Pro Lys Arg Gly Leu
      115          120          125
Ala Glu Arg Thr Gly Ala Ile Gln Trp Gly Asn Arg Phe Gly Pro
      130          135          140

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&lt;210&gt; 2019

&lt;211&gt; 483

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2019

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cgcgctcggcg acgattttat cctcgggggtt cgttataccg ccgatgaatg tctcgagaac
60
ggcaccgggca aggcggaagg catcgaaatc tccagacggc tgaaggagag cggcctgac
120
gactatctca acgtcatcag gggacatatc gacaccgac cggcctgac cgacgtcatc
180
cccattcagg gcatggcgag cgcgccgcat cttgatttcg caggcgaaat ccgcgcggcg
240
accagcttcc ccgtcttcca tgccgcaaaa attcaggatg tcgccaccgc ccggcatgcg
300
attgccgccc gcaaggctga catgatcggc atgacccgcg cccacatgac cgatccgcat
360
atcgccgca agatcatgga aaaacaggag gaggacatcc gcccctgcgt cggcgccaat
420
tattgtcttg atcgattta tcaaggcggc ctgccttct gcattcacia tgcggcaacc
480
ggc
483

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&lt;210&gt; 2020

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2020

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Arg Val Gly Asp Asp Phe Ile Leu Gly Val Arg Tyr Thr Ala Asp Glu
  1           5           10           15
Cys Leu Glu Asn Gly Thr Gly Lys Ala Glu Gly Ile Glu Ile Ser Arg
      20           25           30
Arg Leu Lys Glu Ser Gly Leu Ile Asp Tyr Leu Asn Val Ile Arg Gly

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<210> 2021
<211> 797
<212> DNA
<213> Homo sapiens
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<210> 2022

<211> 135  
<212> PRT  
<213> Homo sapiens

<400> 2022  
Met Asp Thr Arg Ser Gly Ser Gln Cys Ser Val Thr Pro Glu Ala Ile  
1 5 10 15  
Leu Asn Asn Glu Lys Leu Val Leu Pro Pro Arg Ile Ser Arg Val Asn  
20 25 30  
Gly Trp Ser Leu Pro Leu His Tyr Phe Gln Val Val Thr Trp Ala Val  
35 40 45  
Phe Val Gly Leu Ser Ser Ala Thr Phe Gly Ile Phe Ile Pro Phe Leu  
50 55 60  
Pro His Ala Trp Lys Tyr Ile Ala Tyr Val Val Ser Phe Ser Ser Trp  
65 70 75 80  
His Gly Leu Ser Gly Arg Gly Ser Trp Arg Thr Leu Arg Trp Thr Trp  
85 90 95  
Leu Trp Gly Leu Gly His Gly Cys Pro Val Ala Pro Val Thr Cys Pro  
100 105 110  
Gly Pro Asp Tyr Val Pro Arg Ala Cys Arg Trp Ala Gln Trp Pro Leu  
115 120 125  
Met Val Leu Ala Ser Pro Gly  
130 135

<210> 2023  
<211> 462  
<212> DNA  
<213> Homo sapiens

<400> 2023  
naatctccga cgatccctgc cgacgtgctc gccggtgctc tcaagcaggc taaggaggct  
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cgcaccgcga tccttgaggt gatgaacgag gccatcgatt ctcccgatga aatggccccg  
120  
actgctccgc gcattcattac cgtccacatc ccagtggaca agatcgggtga ggatcatcggc  
180  
cccaagggca agatgattaa ccagattcag gacgacactg gcgccaatat ctctattgag  
240  
gacgatggca cgattttcat cggggctgat aacggagatt cggccgagtc tgcccgttcg  
300  
atgatcaacg cgatcgctaa cccacagatg cccgaggtcg gtgagcggtta cctcggcacc  
360  
gtcgtcaaga cgacgagctt tggcgctttc gtctctctgc tgcccggcaa ggatgggtctg  
420  
ttgcacatct ccaagatgcg tgaccttaac gacggtaaac gc  
462

<210> 2024  
<211> 154  
<212> PRT  
<213> Homo sapiens

<400> 2024  
Xaa Ser Pro Thr Ile Pro Ala Asp Val Leu Ala Gly Ala Leu Lys Gln

1	5	10	15
Ala Lys Glu Ala Arg Thr Ala Ile Leu Glu Val Met Asn Glu Ala Ile			
20	25	30	
Asp Ser Pro Asp Glu Met Ala Pro Thr Ala Pro Arg Ile Ile Thr Val			
35	40	45	
His Ile Pro Val Asp Lys Ile Gly Glu Val Ile Gly Pro Lys Gly Lys			
50	55	60	
Met Ile Asn Gln Ile Gln Asp Asp Thr Gly Ala Asn Ile Ser Ile Glu			
65	70	75	80
Asp Asp Gly Thr Ile Phe Ile Gly Ala Asp Asn Gly Asp Ser Ala Glu			
85	90	95	
Ser Ala Arg Ser Met Ile Asn Ala Ile Ala Asn Pro Gln Met Pro Glu			
100	105	110	
Val Gly Glu Arg Tyr Leu Gly Thr Val Val Lys Thr Thr Ser Phe Gly			
115	120	125	
Ala Phe Val Ser Leu Leu Pro Gly Lys Asp Gly Leu Leu His Ile Ser			
130	135	140	
Lys Met Arg Asp Leu Asn Asp Gly Lys Arg			
145	150		

&lt;210&gt; 2025

&lt;211&gt; 872

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2025

cgtggtaacg atttacagga aagaacagct ggaactcgtg ctgggataac caggtacaag  
 60  
 tgctctctgc agagaataag tgcacacagg ttggtgtctt ctgaccgaga gccctcctga  
 120  
 agggagggtct gtacctcctc cctcatctca ttttacacaa ggcgacaggt cagaggccag  
 180  
 ggtgggacga gagcgaggga gcaactgtctc tggcagcagc acttgccact ccacaatgtg  
 240  
 gagaccagaa cggcacccca gagagcacgg gggaaatggc tcatctttaa aacaatggca  
 300  
 gaagaaatcc agccaaggtc acttttcctg tgtgagcatg ttaaggcca gagagtggct  
 360  
 acttctctgc ctctgcagc tccctcagtg tggcttgag gagttggcga agcttccaga  
 420  
 acacgctgga ggctgtctc cgggtgttcc cactggggac ccaggggtct gcacattcct  
 480  
 gcaccgcctc ctgtaactgc agctgaagct ggaaagagac cgcagagctc ttgagaggcg  
 540  
 cggaacacca atggcgaaat attttgtcac agatgacctg caggttgttg tttacgcgct  
 600  
 gcgctccgca tttgttgact cgtaaatcac atcttgaaaa acagtcaaag aaattgcagt  
 660  
 cttcatctcc tgtgcagttt tgcctcaagga tttccctcat ttaggttca aaaaaggcca  
 720  
 tgtccacatc aatagccacc actgtgaagt cgctccggat ggcaaagttt tccggcttga  
 780  
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 840

agctgagtgc gaggcccctg atggccctgg cc  
872

<210> 2026

<211> 157

<212> PRT

<213> Homo sapiens

<400> 2026

Met	Gly	Asn	His	Phe	Asp	Arg	Asp	Cys	Thr	His	Arg	Leu	His	Leu	Cys
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Asp	Ile	Lys	Pro	Glu	Asn	Phe	Ala	Ile	Arg	Ser	Asp	Phe	Thr	Val	Val
		20					25					30			
Ala	Ile	Asp	Val	Asp	Met	Ala	Phe	Glu	Pro	Lys	Met	Arg	Glu	Ile	
	35					40				45					
Leu	Glu	Gln	Asn	Cys	Thr	Gly	Asp	Glu	Asp	Cys	Asn	Phe	Phe	Asp	Cys
	50				55					60					
Phe	Ser	Arg	Cys	Asp	Leu	Arg	Val	Asn	Lys	Cys	Gly	Ala	Gln	Arg	Val
65				70				75						80	
Asn	Asn	Asn	Leu	Gln	Val	Ile	Cys	Asp	Lys	Ile	Phe	Arg	His	Trp	Phe
		85					90						95		
Ser	Ala	Pro	Leu	Lys	Ser	Ser	Ala	Val	Ser	Phe	Gln	Leu	Gln	Leu	Gln
		100					105					110			
Leu	Gln	Glu	Ala	Val	Gln	Glu	Cys	Ala	Asp	Pro	Gly	Val	Pro	Ser	Gly
	115					120					125				
Asn	Thr	Arg	Arg	Ala	Ala	Ser	Ser	Val	Phe	Trp	Lys	Leu	Arg	Gln	Leu
	130				135					140					
Leu	Gln	Ala	Thr	Leu	Arg	Glu	Leu	Gln	Glu	Ala	Glu	Lys			
145					150					155					

<210> 2027

<211> 721

<212> DNA

<213> Homo sapiens

<400> 2027

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120  
agggttgtaa tgtcacttct gtctaattca ttacagaatt acagaatcaa atcatgttag  
180  
ccctagaaga aactgcagat cattttgttc aatcttctca ttatatagga aaggaaattt  
240  
gagggccagt gcaatggttt gccaaaggta cacaactagt tagtggaagg atccaggcat  
300  
tctaattcct ttctttcact aatacatttg gactgctcta cagaattact tctgtctgat  
360  
actatccact ttgaagagta gctagcatat agtagccatt tacttttggc tcaattaaaa  
420  
gcaaacattt ttgggacaaa atcaggcttt cctgattact tcttagataa cagagccac  
480  
acagtattaa aacatgcagc ctttctttat gcaaaaagat tgaatatgga gccacttgaa  
540

tcttaaactt cagtctgcag ctataaccaa tatcatcaga agttatacac aattggcaaa  
 600  
 agaatagctt attctgccca aatacttgtc cagtcactag gatcatttca cttttttgaa  
 660  
 taccatttgc tttggggagg gaagtattgc cagaccgtga attcattatt acctctgatc  
 720  
 a  
 721

<210> 2028

<211> 114

<212> PRT

<213> Homo sapiens

<400> 2028

Met	Asn	Ser	Arg	Ser	Gly	Asn	Thr	Ser	Leu	Pro	Lys	Ala	Asn	Gly	Ile
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Gln	Lys	Ser	Glu	Met	Ile	Leu	Val	Thr	Gly	Gln	Val	Phe	Gly	Gln	Asn
			20					25					30		
Lys	Leu	Phe	Phe	Cys	Gln	Leu	Cys	Ile	Thr	Ser	Asp	Asp	Ile	Gly	Tyr
	35					40					45				
Ser	Cys	Arg	Leu	Lys	Phe	Lys	Ile	Gln	Val	Ala	Pro	Tyr	Ser	Ile	Phe
	50					55					60				
Leu	His	Lys	Glu	Arg	Leu	His	Val	Leu	Ile	Leu	Cys	Gly	Leu	Cys	Tyr
65				70					75				80		
Leu	Arg	Ser	Asn	Gln	Glu	Ser	Leu	Ile	Leu	Ser	Gln	Lys	Cys	Leu	Leu
			85					90					95		
Leu	Ile	Glu	Pro	Lys	Val	Asn	Gly	Tyr	Tyr	Met	Leu	Ala	Thr	Leu	Gln
			100				105						110		
Ser	Gly														

<210> 2029

<211> 8028

<212> DNA

<213> Homo sapiens

<400> 2029

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 120  
 gaggcggcgg tgggtggctga gtccgtggtg gcagaggcga aggcgacagc tctaggggtt  
 180  
 ggcaccggcc ccgagaggag gatgcgggtc cggatagggc tgacgctgct gctgtgtgcg  
 240  
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 300  
 gattccaaga ctactttgac atcagatgag tcagtaaagg accatactac tgcaggcaga  
 360  
 gtagttgctg gtcaaattatt tcttgattca gaagaatctg aattagaatc ctctattcaa  
 420  
 gaagaggaag acagcctcaa gagccaagag ggggaaagtg tcacagaaga tatcagcttt  
 480

ctagagtctc caaatccaga aaacaaggac tatgaagagc caaagaaagt acggaaacca  
540  
gctttgaccg ccattgaagg cacagcacat ggggagccct gccacttccc ttttcttttc  
600  
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660  
gctacaacct atgactacaa agcagatgaa aagtggggct tttgtgaaac tgaagaagag  
720  
gctgctaaga gacggcagat gcaggaagca gaaatgatgt atcaaactgg aatgaaaatc  
780  
cttaatggaa gcaataagaa aagccaaaaa agagaagcat atcggtatct ccaaaaggca  
840  
gcaagcatga accataccaa agccctggag agagtgtcat atgctctttt atttggtgat  
900  
tacttgccac agaatatcca ggcagcgaga gagatgtttg agaagctgac tgaggaaggc  
960  
tctcccaagg gacagactgc tcttggtctt ctgtatgcct ctggacttgg tgttaattca  
1020  
agtcaggcaa aggctcttgt atattataca tttggagctc ttgggggcaa tctaatagcc  
1080  
cacatggttt tgggttacag atactgggct ggcacggcg tcctccagag ttgtgaatct  
1140  
gccctgactc actatcgtct tgttgccaat catgttgcta gtgatatctc gctaacagga  
1200  
ggctcagtag tacagagaat acggctgcct gatgaagtgg aaaatccagg aatgaacagt  
1260  
ggaatgctag aagaagattt gattcaatat taccagttcc tagctgaaaa aggtgatgta  
1320  
caagcacagg ttggtcttgg acaactgcac ctgcacggag ggcgtggagt agaacagaat  
1380  
catcagagag catttgacta cttcaattta gcagcaaag ctggcaattc acatgccatg  
1440  
gccttttttg gaaagatgta ttcggaagga agtgacattg tacctcagag taatgagaca  
1500  
gctctccact actttaagaa agctgctgac atgggcaacc cagttggaca gagtgggctt  
1560  
ggaatggcct acctctatgg gagaggagtt caagttaatt atgatctagc ccttaagtat  
1620  
ttccagaaag ctgctgaaca aggctgggtg gatgggcagc tacagcttgg ttccatgtac  
1680  
tataatggca ttggagtcaa gagagattat aaacaggcct tgaagtattt taatttagct  
1740  
tctcagggag gccatatctt ggctttctat aacctagctc agatgcatgc cagtggcacc  
1800  
ggcgtgatgc gatcatgtca cactgcagtg gagttgttta agaattgatg tgaacgaggc  
1860  
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&lt;210&gt; 2030

&lt;211&gt; 794

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2030

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 Glu Ser Glu Leu Glu Ser Ser Ile Gln Glu Glu Glu Asp Ser Leu Lys  
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Pro	Asn	Pro			Glu	Asn	Lys	Asp	Tyr			Glu	Glu	Pro	Lys	Lys	Val	Arg	Lys																									
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Pro	Ala	Leu	Thr	Ala	Ile	Glu	Gly	Thr	Ala	His	Gly	Glu	Pro	Cys	His																													
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Phe	Pro	Phe	Leu	Phe	Leu	Asp	Lys	Glu	Tyr	Asp	Glu	Cys	Thr	Ser	Asp																													
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Gly	Arg	Glu	Asp	Gly	Arg	Leu	Trp	Cys	Ala	Thr	Thr	Tyr	Asp	Tyr	Lys																													
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Glu Thr Tyr Pro Arg Ala Leu Leu His Trp Asn Arg Ala Ala Ser Gln		
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Phe Gly Thr Asp Val Asp Tyr Glu Thr Ala Phe Ile His Tyr Arg Leu		
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Met His Glu Lys Gly Leu Gly Ile Lys Gln Asp Ile His Leu Ala Lys		
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Arg Phe Tyr Asp Met Ala Ala Glu Ala Ser Pro Asp Ala Gln Val Pro		
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Val Phe Leu Ala Leu Cys Lys Leu Gly Val Val Tyr Phe Leu Gln Tyr		
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Ile Arg Glu Thr Asn Ile Arg Asp Met Phe Thr Gln Leu Asp Met Asp		
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Gln Leu Leu Gly Pro Glu Trp Asp Leu Tyr Leu Met Thr Ile Ile Ala		
740	745	750
Leu Leu Leu Gly Thr Val Ile Ala Tyr Arg Gln Arg Gln His Gln Asp		
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&lt;210&gt; 2032

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2032

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Ala	Ala	Asp	Val	Leu	Val	Met	Ala	Ala	Pro	Met	Tyr	Asn	Phe	Ala	Ile
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Pro	Ser	Thr	Leu	Lys	Ala	Trp	Leu	Asp	His	Val	Leu	Arg	Ala	Gly	Val
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Thr	Phe	Lys	Tyr	Thr	Ala	Thr	Gly	Pro	Gln	Gly	Leu	Leu	His	Gly	Lys
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Leu	Val	Ala													
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&lt;211&gt; 380

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2033

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 300  
 actgggtgctt ttgcctgcca gctctaattt actgttatcc cctttagtga aatttttctt  
 360  
 ttttttctct tctcattcca gttattatac agaactatcc aacttcaaga tttgtggggg  
 420



tttgttttgt tttgttttga gaccccatct caaaaaaaaa aaaaaccagc tttctctca

480

acttggggga acctt

495

<210> 2036

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2036

Xaa Ile Pro Leu Leu Leu Ala Thr Gln Ala Gln Ala Thr Arg Ser His

1

5

10

15

Asp Thr Ser Cys Leu His Phe Phe His Val Cys Met Tyr Val Cys Met

20

25

30

Tyr Val Cys Met Tyr Val Cys Met Tyr Ala Xaa Met Phe Pro Phe His

35

40

45

Leu Ala Cys Leu His Phe Cys Cys Tyr Cys Cys Tyr Leu Cys Val Gly

50

55

60

Ala Pro Asn Gly Val Pro Tyr Phe Ser Asp Ala Val Phe Ile Phe Leu

65

70

75

80

Asp Ser Phe Tyr Cys Leu Val Phe Ser Leu His Asn Pro Tyr Cys Ser

85

90

95

Leu Tyr

<210> 2037

<211> 327

<212> DNA

<213> Homo sapiens

<400> 2037

acgcgtgaag ggaaggggga gaccccgga gaaatggaga aatgggggag cacacagacg

60

ggaagagtga gggtggagtg cctttcccg cgtcatcttc cgtcccccact ccacgccag

120

caaatccaaa caccgcggcc tctgggtggc cgggcttcca tttcccctgg aggggcaagg

180

gcgtttcttc ttccgcccac ccggggcgct gagcggcggg aacagcggcg ggggctttgt

240

gggtccgggg gggtccgagtg tgtgtcaggg gctggggcgg gggatgggag cggcccctgg

300

gtatccctca cggtcctggt tcatgag

327

<210> 2038

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2038

Met Glu Lys Trp Gly Arg Thr Gln Thr Gly Arg Val Arg Leu Glu Cys

1

5

10

15

Leu Ser Arg Ala His Leu Pro Ser Pro Leu His Ala Gln Gln Ile Gln

```

      20      25      30
Thr Pro Arg Pro Leu Val Ala Arg Ala Ser Ile Ser Pro Gly Gly Ala
      35      40      45
Arg Ala Phe Pro Leu Pro Pro Asn Arg Gly Ala Glu Arg Arg Glu Gln
      50      55      60
Arg Arg Gly Leu Cys Gly Pro Gly Gly Ser Glu Cys Val Ser Gly Ala
65      70      75      80
Gly Ala Gly Asp Gly Arg Gly Pro Trp Val Ser Leu Thr Val Leu Val
      85      90      95
His Glu

```

&lt;210&gt; 2039

&lt;211&gt; 307

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2039

```

accggtgatc cactctgcga aagcgggccgc gagcgaagcg ttcttggtct tcttcgagat
60
cgcgatgtat tgcccggaaa acagcggcctt gatgccgtca ttgagaggct ctgggccaac
120
accggtacgg gcatatgcct gggcggcatt cttttggatg ttgcgaagaa aggacgcatt
180
cggcgtgccg aaagccaggg atccttcacc gtagaccttg gaccgatgga ggcccccggc
240
aatcgagtcc ttcgaaattc ccccttgcca tacatgtcgg ccacgtcgt cagccagagt
300
aacgcgt
307

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&lt;210&gt; 2040

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2040

```

Met Ala Asp Met Tyr Ala Lys Gly Glu Phe Arg Arg Thr Arg Leu Pro
1      5      10      15
Gly Ala Ser Ile Gly Pro Arg Ser Thr Val Lys Asp Pro Trp Leu Ser
      20      25      30
Ala Arg Arg Met Arg Pro Phe Phe Ala Thr Ser Lys Arg Met Pro Pro
      35      40      45
Arg His Met Pro Val Pro Val Leu Ala Gln Ser Leu Ser Met Thr Ala
      50      55      60
Ser Ser Arg Cys Phe Pro Gly Asn Thr Ser Arg Ser Arg Arg Arg Pro
65      70      75      80
Arg Thr Leu Arg Ser Arg Pro Leu Ser Gln Ser Gly Ser Pro
      85      90

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&lt;210&gt; 2041

&lt;211&gt; 348

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 2041  
nnccggcgat gcagggattc gcccgcgatg cgctcgaacc cggcgcgggg ggcgttcctc  
60  
gccagcttcc tgccgttcgc cagacgcac gccgaggcgg ggggtgcgcaa ttcgctcgcc  
120  
cagctggtcg ccaagctgac cctgcccggc atgcccgaaca tctaccaggg ctgcgagatg  
180  
tgggacctca gcctggtcga ccgggacaat cggcgccccg tcgactacga gacacgcgac  
240  
gcggccctgg ccggctgggt cgcgaccccg ccggaggaac gcgcccgggc gctgcgcacc  
300  
ctgctgacgg attggcgag cggcgcggtc aagctggccg tgacgcgt  
348

<210> 2042  
<211> 116  
<212> PRT  
<213> Homo sapiens

<400> 2042  
Xaa Arg Arg Cys Arg Asp Ser Pro Ala Met Arg Ser Asn Pro Ala Arg  
1 5 10 15  
Gly Ala Phe Leu Ala Ser Phe Leu Pro Phe Ala Arg Arg Ile Ala Glu  
20 25 30  
Ala Gly Val Arg Asn Ser Leu Ala Gln Leu Val Ala Lys Leu Thr Leu  
35 40 45  
Pro Gly Met Pro Asp Ile Tyr Gln Gly Cys Glu Met Trp Asp Leu Ser  
50 55 60  
Leu Val Asp Arg Asp Asn Arg Arg Pro Val Asp Tyr Glu Thr Arg Asp  
65 70 75 80  
Ala Ala Leu Ala Gly Trp Val Ala Thr Pro Pro Glu Glu Arg Ala Ala  
85 90 95  
Ala Leu Arg Thr Leu Leu Thr Asp Trp Arg Ser Gly Ala Val Lys Leu  
100 105 110  
Ala Val Thr Arg  
115

<210> 2043  
<211> 712  
<212> DNA  
<213> Homo sapiens

<400> 2043  
gatctgacgg tctcgactaa gcctgaccat tccgaggtca ccgacgccga ccttgccgtc  
60  
gaagattcgg tgcgagagc cctgtctcga atgcgtccc gggatgccgt ccacggcgag  
120  
gaacgtgccg ataccgggga tggaccccgc cggatgatca ttgatccgat cgacggcact  
180  
gcgaattttc tgcggtgggt ccagtggtg gccaccctca ttgcctcag cgtcgaggac  
240  
cagattgtcg catctgtggt ctctgtcct gccctcaagc gacgctggtg ggcagcccgt  
300

ggctcaggag catggtcggg caaatccctg gcctcagcga caccgatcca cgtctcgaat  
 360  
 gtgcgcaatc ttgccgacgc attcttgctc tactcttcgc tgcacggatg ggtcgagagc  
 420  
 ggacgagggc acgggttcgg tgaactcatg cggtcggtgt ggcggaacccg agccttcggc  
 480  
 gatttctggg cttacatgat ggtggcagaa ggtgtcgtcg atgtggcatg cgagccggaa  
 540  
 ctcagcctgc acgacatggc cgccctcgac gctatcgtca ccgagggcggg cggtaagtcc  
 600  
 accggtctcg atggcaaaga cggcccgtgg tctgggaatg ctctggcgtc gaatgggttc  
 660  
 cttcatgacc aggccttagc catggtcag cctcaggagt gagcaccgat cg  
 712

<210> 2044

<211> 233

<212> PRT

<213> Homo sapiens

<400> 2044

Asp	Leu	Thr	Val	Ser	Thr	Lys	Pro	Asp	His	Ser	Glu	Val	Thr	Asp	Ala
1				5					10					15	
Asp	Leu	Ala	Val	Glu	Asp	Ser	Val	Arg	Arg	Ala	Leu	Ser	Arg	Met	Arg
			20					25					30		
Ser	Arg	Asp	Ala	Val	His	Gly	Glu	Arg	Ala	Asp	Thr	Gly	Asp	Gly	
		35				40					45				
Pro	Arg	Arg	Trp	Ile	Ile	Asp	Pro	Ile	Asp	Gly	Thr	Ala	Asn	Phe	Leu
	50				55					60					
Arg	Gly	Val	Pro	Val	Trp	Ala	Thr	Leu	Ile	Ala	Leu	Ser	Val	Glu	Asp
65				70					75					80	
Gln	Ile	Val	Ala	Ser	Val	Val	Ser	Ala	Pro	Ala	Leu	Lys	Arg	Arg	Trp
			85					90					95		
Trp	Ala	Ala	Arg	Gly	Ser	Gly	Ala	Trp	Ser	Gly	Lys	Ser	Leu	Ala	Ser
		100					105						110		
Ala	Thr	Pro	Ile	His	Val	Ser	Asn	Val	Arg	Asn	Leu	Ala	Asp	Ala	Phe
		115					120					125			
Leu	Ser	Tyr	Ser	Ser	Leu	His	Gly	Trp	Val	Glu	Ser	Gly	Arg	Gly	His
	130					135				140					
Gly	Phe	Gly	Glu	Leu	Met	Arg	Ser	Val	Trp	Arg	Thr	Arg	Ala	Phe	Gly
145					150					155				160	
Asp	Phe	Trp	Ser	Tyr	Met	Met	Val	Ala	Glu	Gly	Val	Val	Asp	Val	Ala
			165						170				175		
Cys	Glu	Pro	Glu	Leu	Ser	Leu	His	Asp	Met	Ala	Ala	Leu	Asp	Ala	Ile
		180						185					190		
Val	Thr	Glu	Ala	Gly	Gly	Lys	Phe	Thr	Gly	Leu	Asp	Gly	Lys	Asp	Gly
		195					200					205			
Pro	Trp	Ser	Gly	Asn	Ala	Leu	Ala	Ser	Asn	Gly	Phe	Leu	His	Asp	Gln
	210					215					220				
Ala	Leu	Ala	Met	Val	Gln	Pro	Gln	Glu							
225					230										

<210> 2045

<211> 406

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2045

nnttgacac cggcgactat gccgccaccg cacggatcaa tcgcggaccc agggcagggg  
60  
atgcgccgga tgggcgacgg tgatggaccg ggcgctggac ctgggcggtc gcttcgacga  
120  
cantacaggc tttggccgag gcgggttggg agaaaccggt caaccggtgg tttggccccg  
180  
catcaatgcc cagaaccaga agccttgccg attcgtccca ggccggttcaa ggccgatggc  
240  
gagatcgtcg cgatgactgg cgacggtgtc aacgacgccc cctcgctcaa ggccggcccat  
300  
atcgggtgtcg ccatggacaa acgcggcacc gacgtcgcgc gcgaggcttc cgccatggtc  
360  
ctgctcgagg atgattttgg atcgatcgtg cagtcgggtcc ggctcg  
406

&lt;210&gt; 2046

&lt;211&gt; 135

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2046

Xaa	Trp	Thr	Pro	Ala	Thr	Met	Pro	Pro	Pro	His	Gly	Ser	Ile	Ala	Asp
1				5					10					15	
Pro	Gly	Gln	Gly	Met	Arg	Arg	Met	Gly	Asp	Gly	Asp	Gly	Pro	Gly	Ala
		20						25					30		
Gly	Pro	Gly	Arg	Ser	Leu	Arg	Arg	Xaa	Tyr	Arg	Leu	Trp	Pro	Arg	Arg
		35					40					45			
Val	Gly	Arg	Asn	Arg	Ser	Thr	Gly	Gly	Leu	Ala	Pro	His	Gln	Cys	Pro
	50					55					60				
Glu	Pro	Glu	Ala	Leu	Arg	Ile	Arg	Pro	Arg	Pro	Phe	Lys	Ala	Asp	Gly
65					70					75				80	
Glu	Ile	Val	Ala	Met	Thr	Gly	Asp	Gly	Val	Asn	Asp	Ala	Pro	Ser	Leu
			85						90					95	
Lys	Ala	Ala	His	Ile	Gly	Val	Ala	Met	Asp	Lys	Arg	Gly	Thr	Asp	Val
			100					105					110		
Ala	Arg	Glu	Ala	Ser	Ala	Met	Val	Leu	Leu	Glu	Asp	Asp	Phe	Gly	Ser
		115					120					125			
Ile	Val	Gln	Ser	Val	Arg	Leu									
	130					135									

&lt;210&gt; 2047

&lt;211&gt; 796

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2047

aagcttttga acgagacccc tgagctctgg gttcagcccc gaggaagccc agcaacagga  
60  
tgaggaattt gagaagaaga ttccaagtgt ggaagacagc cttggagagg gcagcagggg  
120

tgctggccgg ccaggagaga gaggatccgg gggcttggtc agtcctagca ctgcccacgt  
180  
gccggatggg gcactcgggc agagagacca gagcagctgg caaaacagtg atgctagcca  
240  
ggaggtggga gggcatcagg agagacagca ggcaggggct cagggccctg gcagtgtga  
300  
cctggaagat ggggagatgg gaaagcgagg ctgggtcggt gagtttagcc tcagtgttg  
360  
ccccagcga gaggcagcat ttagcccagg gcagcaggac tggagccggg acttctgcat  
420  
cgaggccagt gagaggagct atcagtttgg catcattggc aacgacagag tgagtgggtgc  
480  
tggctttagc ctttctagca agatggaagg tggtcacttt gtgcctcctg ggaagaccac  
540  
agctggctcg gtggactgga ctgaccagct gggcttcagg aacttggaag tgtccagctg  
600  
tgtgggttct gggggctcga gcgaggccag ggagagtgcc gtgggacaga tgggctggtc  
660  
aggtggcctg agcttgagag acatgaacct gaccggctgt ttggaaagtg gagggctctga  
720  
agagccgggg ggaatcgga ttggggagaa ggactggact tctgatgtta atgtgaagag  
780  
caaagatttg gctgag  
796

<210> 2048  
<211> 160  
<212> PRT  
<213> Homo sapiens

<400> 2048  
Met Gly Lys Arg Gly Trp Val Gly Glu Phe Ser Leu Ser Val Gly Pro  
1 5 10 15  
Gln Arg Glu Ala Ala Phe Ser Pro Gly Gln Gln Asp Trp Ser Arg Asp  
20 25 30  
Phe Cys Ile Glu Ala Ser Glu Arg Ser Tyr Gln Phe Gly Ile Ile Gly  
35 40 45  
Asn Asp Arg Val Ser Gly Ala Gly Phe Ser Pro Ser Ser Lys Met Glu  
50 55 60  
Gly Gly His Phe Val Pro Pro Gly Lys Thr Thr Ala Gly Ser Val Asp  
65 70 75 80  
Trp Thr Asp Gln Leu Gly Leu Arg Asn Leu Glu Val Ser Ser Cys Val  
85 90 95  
Gly Ser Gly Gly Ser Ser Glu Ala Arg Glu Ser Ala Val Gly Gln Met  
100 105 110  
Gly Trp Ser Gly Gly Leu Ser Leu Arg Asp Met Asn Leu Thr Gly Cys  
115 120 125  
Leu Glu Ser Gly Gly Ser Glu Glu Pro Gly Gly Ile Gly Ile Gly Glu  
130 135 140  
Lys Asp Trp Thr Ser Asp Val Asn Val Lys Ser Lys Asp Leu Ala Glu  
145 150 155 160

<210> 2049  
<211> 516

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2049

cgcgtcgctt acggtgcgct gaataccagc ctgctggcgc tggcggtcag cttcgcgctc  
60  
ctgttcctcg ggatagtgtt cgggctgatg ccacgtctga tgtgcggggg gattgaactg  
120  
gccaacgctc ccccgccaat cgccctgggc ctgttagtag tcgccattag cggcccttca  
180  
gcctacggtg ccgcctgtgc ggtgatgttg gtcagttggg ctccgctggc cgccattgt  
240  
gcttcgttgt tggcggaagc ccgcacgcag ccctatatcc gcatgttgcc ggtattgggc  
300  
gtcggccgat ggcgcacgct gaccactac ctgctgccgg cgctctctgc tccctgctg  
360  
cgccacgcca tggtgcgtct gccgggcatt gcgctggcgc tggcggcctt gggttttttt  
420  
ggtcttgggc cgcagccacc cagtgcagaa tgggggctgg tgctggcgga aggcattgcct  
480  
tatctcgaac gggcgccctg gggagtcctg gcaccg  
516

&lt;210&gt; 2050

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2050

Arg	Val	Ala	Tyr	Gly	Ala	Leu	Asn	Thr	Ser	Leu	Leu	Ala	Leu	Ala	Val
1				5				10						15	
Ser	Phe	Ala	Ser	Leu	Phe	Leu	Gly	Ile	Val	Phe	Gly	Leu	Met	Pro	Arg
			20					25					30		
Leu	Met	Cys	Gly	Val	Ile	Glu	Leu	Ala	Asn	Ala	Pro	Pro	Pro	Ile	Ala
		35					40					45			
Leu	Gly	Leu	Leu	Val	Val	Ala	Ile	Ser	Gly	Pro	Ser	Ala	Tyr	Gly	Ala
	50					55					60				
Ala	Cys	Ala	Val	Met	Leu	Val	Ser	Trp	Ala	Pro	Leu	Ala	Ala	His	Cys
65					70				75					80	
Ala	Ser	Leu	Leu	Ala	Glu	Ala	Arg	Thr	Gln	Pro	Tyr	Ile	Arg	Met	Leu
				85				90					95		
Pro	Val	Leu	Gly	Val	Gly	Arg	Trp	Arg	Thr	Leu	Thr	His	Tyr	Leu	Leu
		100				105						110			
Pro	Ala	Leu	Ser	Ala	Pro	Leu	Leu	Arg	His	Ala	Met	Leu	Arg	Leu	Pro
		115				120					125				
Gly	Ile	Ala	Leu	Ala	Leu	Ala	Ala	Leu	Gly	Phe	Phe	Gly	Leu	Gly	Pro
	130				135					140					
Gln	Pro	Pro	Ser	Ala	Glu	Trp	Gly	Leu	Val	Leu	Ala	Glu	Gly	Met	Pro
145					150				155					160	
Tyr	Leu	Glu	Arg	Ala	Pro	Trp	Gly	Val	Leu	Ala	Pro				
				165				170							

&lt;210&gt; 2051

&lt;211&gt; 411

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2051

gagcaaaact atcggttctac cggcaatatt ctgaaaagtg ccaaccaact tatttcgaat  
60  
aatagtgatc gtctcggtaa gaatttatgg accgacggtg aaatggggga gccagtaggt  
120  
atttatgcag catttaatga attagatgag gcaaaatttg tggcgtctca aatccaaaat  
180  
tgggtagatg atgggtgggga attagatgat tgtgctgttt tatatcgtag taatagccaa  
240  
tctcgtgtta ttgaagaagc cttgattcgt tgccaaattc cttatcgaat ttatggcggg  
300  
atgcgattct tcgaacgcca agaaattaaa gatgcgttgg catatttacg ttttaattaat  
360  
aatcgtcaag atgatgccgc atttgagcgt gtgattaata cgcctacgcg t  
411

&lt;210&gt; 2052

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2052

Glu	Gln	Asn	Tyr	Arg	Ser	Thr	Gly	Asn	Ile	Leu	Lys	Ser	Ala	Asn	Gln
1				5				10						15	
Leu	Ile	Ser	Asn	Asn	Ser	Asp	Arg	Leu	Gly	Lys	Asn	Leu	Trp	Thr	Asp
		20						25					30		
Gly	Glu	Met	Gly	Glu	Pro	Val	Gly	Ile	Tyr	Ala	Ala	Phe	Asn	Glu	Leu
		35					40					45			
Asp	Glu	Ala	Lys	Phe	Val	Ala	Ser	Gln	Ile	Gln	Asn	Trp	Val	Asp	Asp
	50					55				60					
Gly	Gly	Glu	Leu	Asp	Asp	Cys	Ala	Val	Leu	Tyr	Arg	Ser	Asn	Ser	Gln
65				70					75				80		
Ser	Arg	Val	Ile	Glu	Glu	Ala	Leu	Ile	Arg	Cys	Gln	Ile	Pro	Tyr	Arg
		85						90					95		
Ile	Tyr	Gly	Gly	Met	Arg	Phe	Phe	Glu	Arg	Gln	Glu	Ile	Lys	Asp	Ala
	100						105					110			
Leu	Ala	Tyr	Leu	Arg	Leu	Ile	Asn	Asn	Arg	Gln	Asp	Asp	Ala	Ala	Phe
	115					120					125				
Glu	Arg	Val	Ile	Asn	Thr	Pro	Thr	Arg							
	130					135									

&lt;210&gt; 2053

&lt;211&gt; 287

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2053

nccatggaag ccttcaatct tgtaagagaa agtgaacagc tgttttccat atgccaaatc  
60  
ccgctcctct gctggatcct gtgtaccagt ctgaagcaag agatgcagaa aggaaaagac  
120



ctggccctga cctgccagag cactacctct gtgtactcct ctttcgtctt taacctgttc  
180  
acacctgagg gtgccgaggg cccgactccg caaaccacgc accagctgaa ggccctgtgc  
240  
tccctggctg cagaggggtat gtggacagac acatttgagt tttgtga  
287

<210> 2054  
<211> 79  
<212> PRT  
<213> Homo sapiens

<400> 2054  
Ile Cys Gln Ile Pro Leu Leu Cys Trp Ile Leu Cys Thr Ser Leu Lys  
1 5 10 15  
Gln Glu Met Gln Lys Gly Lys Asp Leu Ala Leu Thr Cys Gln Ser Thr  
20 25 30  
Thr Ser Val Tyr Ser Ser Phe Val Phe Asn Leu Phe Thr Pro Glu Gly  
35 40 45  
Ala Glu Gly Pro Thr Pro Gln Thr Gln His Gln Leu Lys Ala Leu Cys  
50 55 60  
Ser Leu Ala Ala Glu Gly Met Trp Thr Asp Thr Phe Glu Phe Cys  
65 70 75

<210> 2055  
<211> 298  
<212> DNA  
<213> Homo sapiens

<400> 2055  
nnacgcgttg ttatgaacaa tgacggtgtc ctctaccccg atacctgcgt gggtactgat  
60  
tcccacacca ccatggaaaa tggctcttggc attctgggct ggggcgtcgg tggattgaa  
120  
gccgaggctg ctatgcttgg ccagcccatc tccatgetta tccccgtgt tgttggttt  
180  
aaacttactg gccaaacaca gccgggtgtc accgctacag atgttggtct taccattact  
240  
gatatgcttc gccagcatgg tgtgggtgga aaattcgggg aattctatgg gggaagcg  
298

<210> 2056  
<211> 99  
<212> PRT  
<213> Homo sapiens

<400> 2056  
Xaa Arg Val Val Met Asn Asn Asp Gly Val Leu Tyr Pro Asp Thr Cys  
1 5 10 15  
Val Gly Thr Asp Ser His Thr Thr Met Glu Asn Gly Leu Gly Ile Leu  
20 25 30  
Gly Trp Gly Val Gly Gly Ile Glu Ala Glu Ala Ala Met Leu Gly Gln  
35 40 45  
Pro Ile Ser Met Leu Ile Pro Arg Val Val Gly Phe Lys Leu Thr Gly

50                      55                      60  
 Gln Thr Gln Pro Gly Val Thr Ala Thr Asp Val Val Leu Thr Ile Thr  
 65                      70                      75                      80  
 Asp Met Leu Arg Gln His Gly Val Gly Gly Lys Phe Gly Glu Phe Tyr  
                     85                      90                      95  
 Gly Gly Ser

<210> 2057  
 <211> 569  
 <212> DNA  
 <213> Homo sapiens

<400> 2057  
 acgcgtcccg acagtaccga ctataacgga ggaaactatc aggaacggta taaaatttta  
 60  
 gcagaaattc gtaaggctct tgaagacgga gatcgccaaa aagccaaacg attagctgaa  
 120  
 caaaatctag ttggacccaa caacgcccag tatggctcgtt atctagcctt tggatgatc  
 180  
 ttcattggtct tcaataacca gaaaaagggg ctggatacag ttacagacta tcaccgtggt  
 240  
 ttggatatca cagaagccac tactacaact tcttacaccc aagatggaac gacctttaa  
 300  
 agagaaacct tctcaagtta ccctgatgat gttactgtta ctacttgac caaaaaggg  
 360  
 gacaaaaaac ttgattttac agtttggaa agcttaacag aagatttact tgctaacgga  
 420  
 gactactcag cggaatattc taactacaag agtggccatg ttacgacaga ccaaattggt  
 480  
 atcctactaa aaggtagagt caaagataat ggcctccagt tcgcatacta tctaggaatt  
 540  
 aaaacggacg gaaaagttac tgttcattga  
 569

<210> 2058  
 <211> 128  
 <212> PRT  
 <213> Homo sapiens

<400> 2058  
 Met Val Phe Asn Asn Gln Lys Lys Gly Leu Asp Thr Val Thr Asp Tyr  
 1                      5                      10                      15  
 His Arg Gly Leu Asp Ile Thr Glu Ala Thr Thr Thr Thr Ser Tyr Thr  
                     20                      25                      30  
 Gln Asp Gly Thr Thr Phe Lys Arg Glu Thr Phe Ser Ser Tyr Pro Asp  
                     35                      40                      45  
 Asp Val Thr Val Thr His Leu Thr Gln Lys Gly Asp Lys Lys Leu Asp  
                     50                      55                      60  
 Phe Thr Val Trp Asn Ser Leu Thr Glu Asp Leu Leu Ala Asn Gly Asp  
 65                      70                      75                      80  
 Tyr Ser Ala Glu Tyr Ser Asn Tyr Lys Ser Gly His Val Thr Thr Asp  
                     85                      90                      95  
 Pro Asn Gly Ile Leu Leu Lys Gly Thr Val Lys Asp Asn Gly Leu Gln

100 105 110  
 Phe Ala Ser Tyr Leu Gly Ile Lys Thr Asp Gly Lys Val Thr Val His  
 115 120 125  
  
 <210> 2059  
 <211> 644  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 2059  
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 60  
 agcaatcgac ctgtaggact cagccatgat cgactgggca tcctcgtata gtcgcatgc  
 120  
 cgcaaccgcc tgcgcttcca agcctgcagc gacgtaagag gccctctcac aactgaacc  
 180  
 gatcgctcca gacaacgtgg aagcgataac ctgcgctcgc ttctgctgat tctgggcca  
 240  
 gctcgacaag aagaaccgca gaggggagc ggcctgggtca gggagcgcac cttcagcgtt  
 300  
 cgtcttggtc tccgggacag caaaaagcgg ggaatcagcc aggccacgct ccgtcatgag  
 360  
 tcggccgagg tccgccggtta cctctctcat ggcttcaca ggaacgcggt cacacaccac  
 420  
 cgcgatcgac gcgtgcctct cttgagcctc gttgaggaaa tcccacggca cagcgtcagc  
 480  
 gtagcgggct gctgagggtga caaagatcca cagatccgcg gcctggagca actgagccgc  
 540  
 cagatcacga ttgcgggtca ccacagagtc gatgtccggg gcatcgagga tggccaaacc  
 600  
 tcgcggaatc cttgactccg cgacgagctg caaactcgac gcgt  
 644  
  
 <210> 2060  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 2060  
 Met Arg Glu Val Pro Ala Asp Leu Gly Arg Leu Met Thr Glu Arg Gly  
 1 5 10 15  
 Leu Ala Asp Ser Pro Leu Phe Ala Val Pro Glu Thr Lys Thr Asn Ala  
 20 25 30  
 Glu Gly Ala Leu Pro Asp Gln Ala Val Ala Pro Leu Arg Phe Phe Leu  
 35 40 45  
 Ser Ser Leu Ala Gln Asn Gln Gln Lys Arg Arg Glu Val Ile Ala Ser  
 50 55 60  
 Thr Leu Ser Gly Ala Ile Gly Ser Val Cys Glu Arg Ala Ser Tyr Val  
 65 70 75 80  
 Ala Ala Gly Leu Glu Ala Gln Ala Val Ala Ala Ser Arg Leu Tyr Glu  
 85 90 95  
 Asp Ala Gln Ser Ile Met Ala Glu Ser Tyr Arg Ser Ile Ala Ala Gln  
 100 105 110  
 Ser Ala Asp Gly Thr Leu Leu Arg Gly Glu Val Leu Ala Arg Trp His

115 120 125  
Glu Phe  
130

<210> 2061  
<211> 481  
<212> DNA  
<213> Homo sapiens

<400> 2061  
gttaacctgg taaggagagc gacacaggaa ggtgcagggg ttgccatggt gtggccccag  
60  
atgctgtgat tacgcgccag ccccgtcaca ccgtacgggt ggtaggactg ggcaaagaag  
120  
acgccgccac ctggatgcac tgaggtgtgc acagccacgt ggagatgatg ctggggggctc  
180  
acggtgactc tcaggaggcc ctggcctggc ctatctggag ccttctctgt gaaatgaggg  
240  
tggtaacgcc cactagcagg gttgtagggg acatggatct gtggccacct cctcaagggg  
300  
tgccacacgc accaggtcct gactgggagt ccggcccccga gggcctgtgg atggctggcc  
360  
tggggcccagc ctccgcccc aagggtgctg gcacctggca tgtgcccagc agttgggggc  
420  
ggctgggtggg aagggtgtgtg tcaggtggcg gagcctcggt gccaggatct cactcacgcg  
480  
t  
481

<210> 2062  
<211> 133  
<212> PRT  
<213> Homo sapiens

<400> 2062  
Met Pro Gly Ala Ser Thr Leu Gly Gly Gly Trp Ala Gln Ala Ser  
1 5 10 15  
His Pro Gln Ala Leu Gly Ala Gly Leu Pro Val Arg Thr Trp Cys Val  
20 25 30  
Trp Gln Pro Leu Arg Arg Trp Pro Gln Ile His Val Pro Tyr Asn Pro  
35 40 45  
Ala Ser Gly Arg Tyr Gln Pro His Phe Thr Glu Lys Ala Pro Asp Arg  
50 55 60  
Pro Gly Gln Gly Leu Leu Arg Val Thr Val Ser Pro Gln His His Leu  
65 70 75 80  
His Val Ala Val His Thr Ser Val His Pro Gly Gly Gly Val Phe Phe  
85 90 95  
Ala Gln Ser Tyr His Pro Tyr Gly Val Thr Gly Leu Ala Arg Asn His  
100 105 110  
Ser Ile Trp Gly His Thr Met Ala Thr Pro Ala Pro Ser Cys Val Ala  
115 120 125  
Leu Leu Thr Arg Leu  
130

<210> 2063  
<211> 419  
<212> DNA  
<213> Homo sapiens

<400> 2063  
gccggcgccg tcgagcgcggt gccttttcaat atcgaggccc aagacatggg gctgctcatc  
60  
gcggacacca atgccccgca catgctttcc gacggccaat acgcctcccg ccggggcatc  
120  
atcgacgccg tccaatctgc cgccggttgc tccatccgcg agatctcgaa tgcggtggac  
180  
tttgccgcca ccgtcaatcc cgccgagggc gaactctatc gccgcgcggt gcaccacgtg  
240  
gtggaagaaa ccaaccggac cctagatgcc gctaccgcgc tggcatcttc cgatctagat  
300  
acattccggc ggcttatgcy cgagagccac atctccctgc ggcaccttta tgaggtcacc  
360  
actccggagc tcgactccgt ttttaccgcy gccggcgagc tgggcgctcg catgannnn  
419

<210> 2064  
<211> 139  
<212> PRT  
<213> Homo sapiens

<400> 2064  
Ala Gly Ala Val Glu Arg Val Pro Phe Asn Ile Glu Ala Gln Asp Met  
1 5 10 15  
Val Leu Leu Ile Ala Asp Thr Asn Ala Pro His Met Leu Ser Asp Gly  
20 25 30  
Gln Tyr Ala Ser Arg Arg Gly Ile Ile Asp Ala Val Gln Ser Ala Ala  
35 40 45  
Gly Cys Ser Ile Arg Glu Ile Ser Asn Ala Val Asp Phe Ala Ala Thr  
50 55 60  
Val Asn Pro Ala Glu Ala Glu Leu Tyr Arg Arg Arg Val His His Val  
65 70 75 80  
Val Glu Glu Thr Asn Arg Thr Leu Asp Ala Ala Thr Ala Leu Ala Ser  
85 90 95  
Ser Asp Leu Asp Thr Phe Arg Arg Leu Met Arg Glu Ser His Ile Ser  
100 105 110  
Leu Arg Asp Leu Tyr Glu Val Thr Thr Pro Glu Leu Asp Ser Val Phe  
115 120 125  
Thr Ala Ala Gly Glu Leu Gly Ala Arg Met Xaa  
130 135

<210> 2065  
<211> 598  
<212> DNA  
<213> Homo sapiens

<400> 2065  
gccggcgcta tggcctctct gctcgccgac gccgcccgatg cccttccccg cgcaaagggtg  
60

cgcgcgaccg ttactggatc ggcgggattg ggaaccgcag aggcattggg ccttactttc  
120  
attcaggagg tcatagctga gacggccgcc gtccaacgtt ggaatcccga cgccgacgtg  
180  
cttctcgaac tcggtggtga ggatgccaaag atcacctacc ttaagccggt ccccgaaacag  
240  
cgcatgaatg gttcgtgtgc tggcggcacc ggtgccttca tcgaccagat ggctaccctg  
300  
ctgcacaccg acactcccgg cctcaatgac ctgcgatccc gagccaagac catccatccg  
360  
atcgccctgc gctgtggtgt ttttgccaag tccgaccttc agcccctcat taacgagggg  
420  
gcccgccacg aggatctggc tgcctcgggc ctgcaggctg tcgccactca gtgcattgcc  
480  
ggcctggcat gtggtcgccc gattcgaggt aaggatcatc tccttggcgg tccgcttcac  
540  
tttatgccaa gtttgcgaga cgctttctcg cgcgtcctcg acggttaagg tgcgcgt  
598

&lt;210&gt; 2066

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2066

Ala	Gly	Ala	Met	Ala	Ser	Leu	Leu	Ala	Asp	Ala	Ala	Asp	Ala	Leu	Pro
1				5				10						15	
Gly	Ala	Lys	Val	Arg	Ala	Thr	Val	Thr	Gly	Ser	Ala	Gly	Leu	Gly	Thr
			20					25					30		
Ala	Glu	Ala	Leu	Gly	Leu	Thr	Phe	Ile	Gln	Glu	Val	Ile	Ala	Glu	Thr
		35					40					45			
Ala	Ala	Val	Gln	Arg	Trp	Asn	Pro	Asp	Ala	Asp	Val	Leu	Leu	Glu	Leu
	50					55					60				
Gly	Gly	Glu	Asp	Ala	Lys	Ile	Thr	Tyr	Leu	Lys	Pro	Val	Pro	Glu	Gln
65					70					75				80	
Arg	Met	Asn	Gly	Ser	Cys	Ala	Gly	Gly	Thr	Gly	Ala	Phe	Ile	Asp	Gln
				85					90					95	
Met	Ala	Thr	Leu	Leu	His	Thr	Asp	Thr	Pro	Gly	Leu	Asn	Asp	Leu	Ala
			100					105					110		
Ser	Arg	Ala	Lys	Thr	Ile	His	Pro	Ile	Ala	Ser	Arg	Cys	Gly	Val	Phe
		115						120				125			
Ala	Lys	Ser	Asp	Leu	Gln	Pro	Leu	Ile	Asn	Glu	Gly	Ala	Arg	His	Glu
	130					135						140			
Asp	Leu	Ala	Ala	Ser	Val	Leu	Gln	Ala	Val	Ala	Thr	Gln	Cys	Ile	Ala
145					150					155				160	
Gly	Leu	Ala	Cys	Gly	Arg	Pro	Ile	Arg	Gly	Lys	Val	Ile	Phe	Leu	Gly
				165					170					175	
Gly	Pro	Leu	His	Phe	Met	Pro	Ser	Leu	Arg	Asp	Ala	Phe	Ser	Arg	Val
			180					185					190		
Leu	Asp	Gly	Lys	Val	Asp	Ala									
			195												

&lt;210&gt; 2067

&lt;211&gt; 366

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2067

ttccagcaga tgctgcaaac ctggacccgc agcggcacgc tgcaggaggc cgtggccaac  
60  
aagatcgccg aatggctgga tgccgacctg caacagtggg acatttcccg cgatgcaccg  
120  
tacttcgggt tcgagatccc gggcgagcca ggcaagtatt tctacgtgtg gctggacgcg  
180  
ccgatcggct acatggccag tttcaagaac ctgtgcgacc gcacgccgga gctggacttc  
240  
gatgctttct gggccaagga ctccaccgcc gagctgtacc atttcatcgg caaggacatc  
300  
gtcaacttcc acgccctggt ctggccggcg atgctcgaag gctcgggcta ccgtaaaccg  
360  
accggt  
366

&lt;210&gt; 2068

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2068

Phe	Gln	Gln	Met	Leu	Gln	Thr	Trp	Thr	Arg	Ser	Gly	Thr	Leu	Gln	Glu
1				5				10						15	
Ala	Val	Ala	Asn	Lys	Ile	Ala	Glu	Trp	Leu	Asp	Ala	Asp	Leu	Gln	Gln
			20					25					30		
Trp	Asp	Ile	Ser	Arg	Asp	Ala	Pro	Tyr	Phe	Gly	Phe	Glu	Ile	Pro	Gly
		35					40					45			
Glu	Pro	Gly	Lys	Tyr	Phe	Tyr	Val	Trp	Leu	Asp	Ala	Pro	Ile	Gly	Tyr
	50					55				60					
Met	Ala	Ser	Phe	Lys	Asn	Leu	Cys	Asp	Arg	Thr	Pro	Glu	Leu	Asp	Phe
65				70				75						80	
Asp	Ala	Phe	Trp	Ala	Lys	Asp	Ser	Thr	Ala	Glu	Leu	Tyr	His	Phe	Ile
			85					90						95	
Gly	Lys	Asp	Ile	Val	Asn	Phe	His	Ala	Leu	Phe	Trp	Pro	Ala	Met	Leu
		100						105						110	
Glu	Gly	Ser	Gly	Tyr	Arg	Lys	Pro	Thr	Gly						
		115					120								

&lt;210&gt; 2069

&lt;211&gt; 280

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2069

cctagagagg atggtggaga ctgtgcgtgt gcaggggtgt ccggaacctt ccctgggatg  
60  
catggggcct cgccgcaggc catctctcca gacctgggct caccctgcc ctgtgctgtt  
120  
gcctttggct ggaattccac cccagccttc ttgcctcaag aacgcccttc ccccttcaga  
180

tctcatgggc acaggccccg tcttcctaaa cggggtcaga gccccagta atcatgacaa  
 240  
 agaccctctc ctcgatcaag ctttgggtcaa gctcctaccc  
 280

<210> 2070  
 <211> 90  
 <212> PRT  
 <213> Homo sapiens

<400> 2070  
 Met Val Glu Thr Val Arg Val Gln Gly Val Pro Glu Pro Ser Leu Gly  
 1 5 10 15  
 Cys Met Gly Pro Arg Arg Arg Pro Ser Leu Gln Thr Trp Ala His Pro  
 20 25 30  
 Ala Pro Val Leu Leu Pro Leu Ala Gly Ile Pro Pro Gln Pro Ser Cys  
 35 40 45  
 Leu Lys Asn Ala Leu Pro Pro Ser Asp Leu Met Gly Thr Gly Pro Val  
 50 55 60  
 Phe Leu Asn Gly Val Arg Ala Pro Ser Asn His Asp Lys Asp Pro Leu  
 65 70 75 80  
 Leu Asp Gln Ala Leu Val Lys Leu Leu Pro  
 85 90

<210> 2071  
 <211> 399  
 <212> DNA  
 <213> Homo sapiens

<400> 2071  
 acgcgtgtcc agcagactta gaaagcaggt tcctcttggtc atacagcacg ttaacatagc  
 60  
 tgacgaggcc tgggtgtctt catcagtact gtgatgactc tttcaccttt gacttcagat  
 120  
 gctggcgctt tttacttttt gtgccaaact ctacacatga aacacttttg gaataactac  
 180  
 agacatgact ttctttatct ggggaaaagg agggcattaa accagattag gggctgggag  
 240  
 gggaggttgt caggggatga gctgctcctg aggaagaggc agagatcaag cttcactcag  
 300  
 cagctggatt ctcacctagt ttatagactg aaatcctgca aggtgggttac aacagtgaac  
 360  
 aatatgttca tacataaaga ctctaccctc aggtgatca  
 399

<210> 2072  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 2072  
 Met Thr Leu Ser Pro Leu Thr Ser Asp Ala Gly Ala Phe Tyr Phe Leu  
 1 5 10 15  
 Cys Gln Thr Leu His Met Lys His Phe Trp Asn Asn Tyr Arg His Asp



20 25 30  
Phe Leu Tyr Leu Gly Lys Arg Arg Ala Leu Asn Gln Ile Arg Gly Trp  
35 40 45  
Glu Gly Arg Leu Ser Gly Asp Glu Leu Leu Leu Arg Lys Arg Gln Arg  
50 55 60  
Ser Ser Phe Thr Gln Gln Leu Asp Ser His Leu Val Tyr Arg Leu Lys  
65 70 75 80  
Ser Cys Lys Val Val Thr Thr Val Asn Asn Met Phe Ile His Lys Asp  
85 90 95  
Ser Thr Leu Arg  
100

<210> 2073  
<211> 339  
<212> DNA  
<213> Homo sapiens

<400> 2073  
ggatccactt ctgtgccttt ccagcttcta gaggctgcct gcgttccttg gctcgtggcc  
60  
ccttcctcca ccttcaagcc agcagcggag gcctgagtc tctcatgcc atctctctgt  
120  
tctctctcct gcctcctcct ccacactgaa ggaccctgt gatcacactg gccccccac  
180  
cggatgaccc aggataatcc atctccctgt ttgaaggctg gctgattagc aaccttcatt  
240  
ccatctgcct ccttcattcc ccctggccat gtaatgggat tcacagcttc tggggattag  
300  
gacatggaca tcttgtggcg ggggcataat tctgtcgac  
339

<210> 2074  
<211> 85  
<212> PRT  
<213> Homo sapiens

<400> 2074  
Met Lys Glu Ala Asp Gly Met Lys Val Ala Asn Gln Pro Thr Phe Lys  
1 5 10 15  
Gln Gly Asp Gly Leu Ser Trp Val Ile Arg Trp Gly Gly Gln Cys Asp  
20 25 30  
His Arg Gly Pro Ser Val Trp Arg Arg Arg Gln Glu Arg Glu Gln Arg  
35 40 45  
Asp Gly Met Arg Arg Thr Gln Ala Ser Ala Ala Gly Leu Lys Val Glu  
50 55 60  
Glu Gly Ala Thr Ser Gln Gly Thr Gln Ala Ala Ser Arg Ser Trp Lys  
65 70 75 80  
Gly Thr Glu Val Asp  
85

<210> 2075  
<211> 481  
<212> DNA  
<213> Homo sapiens

<400> 2075  
ntggccaggt tgacctcaaa ggtgtacatt gttttatgtg gcgacaatgg actgtcagaa  
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accaaggagc tctcctgtcc agagaagtcc ctgtttgaaa ggaattccag acacaccttt  
120  
atcctgagcg ctcttgccca actgggcctg ctgaggaaga tccgcctctg gcacgacagc  
180  
cgtgggcctt cccagggctg gttcatcagc cacgtgatgg tgaaggagct gcacacggga  
240  
cagggtggt tcttcctgc ccagtgtgg ctgtctgccg gcaggcatga tggctcgcgtg  
300  
gagcgggagc tcacctgtct gcaaggggga ctcggcttct ggaagctttt ctattgcaag  
360  
ttcacagagt acctggagga tttccatgtc tggctgtcgg tgtacagcag gccctcctcc  
420  
agccgctacc tgcacacgcc gcgccccacc gtgtccttct ccctgctgtg cgtctacgcg  
480  
t  
481

<210> 2076  
<211> 160  
<212> PRT  
<213> Homo sapiens

<400> 2076  
Xaa Ala Arg Leu Thr Ser Lys Val Tyr Ile Val Leu Cys Gly Asp Asn  
1 5 10 15  
Gly Leu Ser Glu Thr Lys Glu Leu Ser Cys Pro Glu Lys Ser Leu Phe  
20 25 30  
Glu Arg Asn Ser Arg His Thr Phe Ile Leu Ser Ala Pro Ala Gln Leu  
35 40 45  
Gly Leu Leu Arg Lys Ile Arg Leu Trp His Asp Ser Arg Gly Pro Ser  
50 55 60  
Pro Gly Trp Phe Ile Ser His Val Met Val Lys Glu Leu His Thr Gly  
65 70 75 80  
Gln Gly Trp Phe Phe Pro Ala Gln Cys Trp Leu Ser Ala Gly Arg His  
85 90 95  
Asp Gly Arg Val Glu Arg Glu Leu Thr Cys Leu Gln Gly Gly Leu Gly  
100 105 110  
Phe Trp Lys Leu Phe Tyr Cys Lys Phe Thr Glu Tyr Leu Glu Asp Phe  
115 120 125  
His Val Trp Leu Ser Val Tyr Ser Arg Pro Ser Ser Ser Arg Tyr Leu  
130 135 140  
His Thr Pro Arg Pro Thr Val Ser Phe Ser Leu Leu Cys Val Tyr Ala  
145 150 155 160

<210> 2077  
<211> 1410  
<212> DNA  
<213> Homo sapiens

<400> 2077

ncagagtgtt ttgagctatc tggatatcca aatgatgtga atactttcag aaaccaatgg  
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caaattgaac ccaactgttt gcgaattcgg cagcagtaaa gatctttttt ttttttttgt  
120  
tttttttttt tttttttttt ttttgctttc taaagtggct ttaatatcac acaagcggct  
180  
ctttggtcta cagtgaagaga aaacagaggg agccaggaaa ggctccccgc tggcctctgg  
240  
agtccaggag ccttaggaag gctgaaaaca gccctgacca gcaggcttag ttgtcctgag  
300  
aagagccagt gaggccacct ggtccagttc accaggtttc ccagggaagc acaggcatct  
360  
ctgggtcccc gagcacagtg ccagggaaga ccccccaat ccccatctga acaggccgag  
420  
ggcagcatgg gaaaggctca gactgcaggt tcatcccgca ggatggtaag gacacgtgct  
480  
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540  
ggggctgtgc agcgttacc agggggagga gttcagccat caggaccttt tccaagtga  
600  
tctgctggtc cagcacagcc actcgcagct tgagggccgc cagggtctgc agctcctggg  
660  
tgctggagta gacaagcagc tgggnnggct ccatgcaggc tccgctctac cccacagga  
720  
cggcgaggct ccgggggggc tnnccccaca gacatggtct tggaggctgt tccgccaccg  
780  
ctgcacgcag ctctgcagc ctgtgcagac actggccac catggcctgc agccccctca  
840  
gcttgagcag gcagcgttac tcctgcatcc agtccatggg ggctgctgag agctcctccc  
900  
tcatgcgcag tctcagcagc gagcaggcct tccgcaggcg cccgcctcc gcctccacct  
960  
ccacagcact gagcctgggc tggggccccgc ctgaagctgt ctgcatgttc tggaggaact  
1020  
gggttttggc agcggcggca tccgtggaat cactgggtctg tgtggaactg agctgggccc  
1080  
acaggctcga gttctgggaa gctgctttcc tgaatgccgc aggcagccgc agcagggtgcc  
1140  
ccttctcctt gagtgtgaag gcttctgggg cctgaggagc agcggatggg gccatttgct  
1200  
gggtccctgag gcccgcccca ggctggggg ttcgggctcc catcccaaca cgggtcccat  
1260  
ccccactga cagcagccgg cgctcagggg ggcccttggc aggcaccgtg gtctggcgga  
1320  
ggcccttggg gggctctgtg tctgaagcat ggccaccagc ttggcctggg gaatgcggtg  
1380  
gggcggaggc tgtcgtgcca gaagaggtga  
1410

<210> 2078  
<211> 106  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 2078

Gly His Leu Val Gln Phe Thr Arg Phe Pro Arg Glu Ala Gln Ala Ser  
 1 5 10 15  
 Leu Gly Pro Arg Ala Gln Cys Gln Gly Arg His Pro Gln Ser Pro Ser  
 20 25 30  
 Glu Gln Ala Glu Gly Ser Met Gly Lys Ala Gln Thr Ala Gly Ser Ser  
 35 40 45  
 Arg Arg Met Val Arg Thr Arg Ala Pro Pro Ser Gln Glu Gln Ala Cys  
 50 55 60  
 Ala Gln Pro Gly Thr Gly Pro Ala Arg Ala Ala Pro Ala Ala Val Gln  
 65 70 75 80  
 Arg Leu Pro Gly Gly Gly Val Gln Pro Ser Gly Pro Phe Pro Ser Gly  
 85 90 95  
 Ser Ala Gly Pro Ala Gln Pro Leu Ala Ala  
 100 105

&lt;210&gt; 2079

&lt;211&gt; 565

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2079

atttacctcg caaccgaccc tgatcgtgaa ggtgaaagca tcagctggca catccagcag  
 60  
 gtactggcgg tcaaataccta caaacgcatt accttcaacg agatcactct caagcgcggt  
 120  
 gaagaggcac tggccaatcc tcgacaaatc gatctgaaca gagttgcctc acaggaatgc  
 180  
 cggcgtgtgc ttgaccgctt ggtggggtac ctggtgaccc aagagttgcy gcgcctgatg  
 240  
 ggcaaaccta ctcccgctgg ccgcgttcaa tcaccgccc tggtttcttgt ggtcttgccg  
 300  
 gaacgcgaga tccgcaactt tcagggtgatc aatcactttg gcgtgcgtct gttctttgcc  
 360  
 gatgtaagtc ggggcaccac ttggtatgcc gagtggcaac cggtagcgga tttcgcaagc  
 420  
 aagcacttcc cctatgttca ggatagcaac ctggctcagc acgtcgccgg cactcgaaat  
 480  
 gtggtcgtgg agtcctgcga ggatcgcaag gccgagcgtc atcctcctgc accattcatc  
 540  
 tcatccactc ttcaacaggc cgcca  
 565

&lt;210&gt; 2080

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2080

Ile Tyr Leu Ala Thr Asp Pro Asp Arg Glu Gly Glu Ser Ile Ser Trp  
 1 5 10 15  
 His Ile Gln Gln Val Leu Ala Val Lys Ser Tyr Lys Arg Ile Thr Phe  
 20 25 30  
 Asn Glu Ile Thr Leu Lys Arg Val Glu Glu Ala Leu Ala Asn Pro Arg

```

      35      40      45
Gln Ile Asp Leu Asn Arg Val Ala Ser Gln Glu Cys Arg Arg Val Leu
  50      55      60
Asp Arg Leu Val Gly Tyr Leu Val Thr Gln Glu Leu Arg Arg Leu Met
  65      70      75      80
Gly Lys Pro Thr Ser Ala Gly Arg Val Gln Ser Pro Ala Val Phe Leu
      85      90      95
Val Val Leu Arg Glu Arg Glu Ile Arg Asn Phe Gln Val Ile Asn His
      100      105      110
Phe Gly Val Arg Leu Phe Phe Ala Asp Val Ser Arg Gly Thr Thr Trp
      115      120      125
Tyr Ala Glu Trp Gln Pro Val Pro Asp Phe Ala Ser Lys His Phe Pro
      130      135      140
Tyr Val Gln Asp Ser Asn Leu Ala Gln His Val Ala Gly Thr Arg Asn
      145      150      155      160
Val Val Val Glu Ser Cys Glu Asp Arg Lys Ala Glu Arg His Pro Pro
      165      170      175
Ala Pro Phe Ile Ser Ser Thr Leu Gln Gln Ala Ala
      180      185

```

<210> 2081  
 <211> 319  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2081
aagcttatgg aaaaacgggg atacggagag gagtatataa atcgctataa aatgatgaca
  60
aggttccatc atcaacgggt tccactagta attttgggtgt gtggaactgc ctgtactgga
  120
aaatcaacaa tcgctacaca acttgctcag aggetcaatt tgcctaattgt tttgcagacg
  180
gacatgggtgt atgagctgct gcggacatca acagatgcgc cacttacttc agttcctgtg
  240
tgggctcgcg attttaattc acctgaagag cttatcactg aattctgcag agaatgcaga
  300
gttgtagcga agggtttgg
  319

```

<210> 2082  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2082
Lys Leu Met Glu Lys Arg Gly Tyr Gly Glu Glu Tyr Ile Asn Arg Tyr
  1      5      10      15
Lys Met Met Thr Arg Phe His His Gln Arg Val Pro Leu Val Ile Leu
      20      25      30
Val Cys Gly Thr Ala Cys Thr Gly Lys Ser Thr Ile Ala Thr Gln Leu
      35      40      45
Ala Gln Arg Leu Asn Leu Pro Asn Val Leu Gln Thr Asp Met Val Tyr
      50      55      60
Glu Leu Leu Arg Thr Ser Thr Asp Ala Pro Leu Thr Ser Val Pro Val

```

```

65              70              75              80
Trp Ala Arg Asp Phe Asn Ser Pro Glu Glu Leu Ile Thr Glu Phe Cys
              85              90              95
Arg Glu Cys Arg Val Val Arg Lys Gly Leu
              100              105

```

```
<210> 2083
<211> 382
<212> DNA
<213> Homo sapiens
```

```

<400> 2083
nngcctgatt gcgacatggc cgtcagagtc gctgtaacac gcaagcagct atataccatc
60
atacctactg ttgaatgcaa ctgtggccac gttttctgct ttggctgtgg tttggatgga
120
caccagccgg tcatttgtgc tgttgtccgc ttgtggctga aaaaatgtgc ggatgacagt
180
gagacgtcca actggatcgg cgctaatacc aaggaatgcc ccaaatgctg ttcgacgatt
240
gaaaagaatg gcggatgtaa tcatatgacg tgtcgcaagt gcaaatacga attttgttgg
300
atttgctcgg gcccatggtc ggagcacgga aacaactatt acaactgcaa tcggtaacgat
360
gaaaaggcag gagatgaagg tn
382

```

```
<210> 2084
<211> 127
<212> PRT
<213> Homo sapiens
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```

<400> 2084
Xaa  Pro  Asp  Cys  Asp  Met  Ala  Val  Glu  Cys  Ala  Val  Thr  Arg  Lys  Gln
  1      5      10      15
Leu  Tyr  Thr  Ile  Pro  Thr  Val  Glu  Cys  Asn  Cys  Gly  His  Val  Phe
      20      25      30
Cys  Phe  Gly  Cys  Gly  Leu  Asp  Gly  His  Gln  Pro  Val  Ile  Cys  Ala  Val
      35      40      45
Val  Arg  Leu  Trp  Leu  Lys  Lys  Cys  Ala  Asp  Asp  Ser  Glu  Thr  Ser  Asn
      50      55      60
Trp  Ile  Gly  Ala  Asn  Thr  Lys  Glu  Cys  Pro  Lys  Cys  Cys  Ser  Thr  Ile
65      70      75      80
Glu  Lys  Asn  Gly  Gly  Cys  Asn  His  Met  Thr  Cys  Arg  Lys  Cys  Lys  Tyr
      85      90      95
Glu  Phe  Cys  Trp  Ile  Cys  Ser  Gly  Pro  Trp  Ser  Glu  His  Gly  Asn  Asn
      100     105     110
Tyr  Tyr  Asn  Cys  Asn  Arg  Tyr  Asp  Glu  Lys  Ala  Gly  Asp  Glu  Gly
      115     120     125

```

```
<210> 2085
<211> 478
<212> DNA
<213> Homo sapiens
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&lt;400&gt; 2085

nnggatccca aagaccgcga tattgccatg gtgttccaaa actatgccct ctaccgcac  
 60  
 atgactgtcg ccgacaacat gggttttgcc ctcaaactgg cgaaagtgga taagaaagaa  
 120  
 atccggcgtc gcgtggagga agccgccgaa ctctcgacc tcaccgacta tctggaccgc  
 180  
 aaaccaagg cactctccgg tggccagcgg cagcgcgtcg ccatggggcg cgctattgtt  
 240  
 cgttccccc gcgtcttctt gatggacgag cctctttcta acctggatgc gcgtctgcgt  
 300  
 gtccgcaccc gcgcccagat tgcggaactg cagcgccgcc tgggcaccac caccgtttat  
 360  
 gtcacccatg accaggtgga ggctatgacg atgggggatc gtgtggctgt tctctgtgcc  
 420  
 gggaaactgc agcaggtgga tactccacgt aatcttttcg accacccgcg taacgcgt  
 478

&lt;210&gt; 2086

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2086

Xaa	Asp	Pro	Lys	Asp	Arg	Asp	Ile	Ala	Met	Val	Phe	Gln	Asn	Tyr	Ala	1	5	10	15
Leu	Tyr	Pro	His	Met	Thr	Val	Ala	Asp	Asn	Met	Gly	Phe	Ala	Leu	Lys	20	25	30	
Leu	Ala	Lys	Val	Asp	Lys	Lys	Glu	Ile	Arg	Arg	Arg	Val	Glu	Glu	Ala	35	40	45	
Ala	Glu	Leu	Leu	Asp	Leu	Thr	Asp	Tyr	Leu	Asp	Arg	Lys	Pro	Lys	Ala	50	55	60	
Leu	Ser	Gly	Gly	Gln	Arg	Gln	Arg	Val	Ala	Met	Gly	Arg	Ala	Ile	Val	65	70	75	80
Arg	Ser	Pro	Arg	Val	Phe	Leu	Met	Asp	Glu	Pro	Leu	Ser	Asn	Leu	Asp	85	90	95	
Ala	Arg	Leu	Arg	Val	Arg	Thr	Arg	Ala	Gln	Ile	Ala	Glu	Leu	Gln	Arg	100	105	110	
Arg	Leu	Gly	Thr	Thr	Thr	Val	Tyr	Val	Thr	His	Asp	Gln	Val	Glu	Ala	115	120	125	
Met	Thr	Met	Gly	Asp	Arg	Val	Ala	Val	Leu	Cys	Ala	Gly	Lys	Leu	Gln	130	135	140	
Gln	Val	Asp	Thr	Pro	Arg	Asn	Leu	Phe	Asp	His	Pro	Ala	Asn	Ala		145	150	155	

&lt;210&gt; 2087

&lt;211&gt; 731

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2087

gataattctc tacacggcat gagctgggga cgtacccccc ttgccaacgt cacctcacgg  
 60

tcgtaccgtg gtgattagca gctagccgag gcgctagccg ccatataaga ttcccaaatt  
120  
aaaagaaaaa gcattgcgtc ggccaagaat tgctgtcgct gctgcaacgg ctactgcgct  
180  
ggtcggatca atcgagcaa tcacccctc cccaggcag aagctaactc caataggcca  
240  
cgctcggtag ctcaagccgc tatcgccacg gatggaaagg ggataatcaa caaggactgc  
300  
cgtgatgcag tcatcaacga tgcaaagctg cgtgccgcga ttgccggtgc gttgggtaag  
360  
gctggattta gttccgccga cgcggtggct ctacgcccgc gtattgccag agaaatggca  
420  
aaagagggcg tcctcctcat caaccaccac aagctaaagg ctctcatcgg agcccagggtg  
480  
ggctctgctca ctgatgcgaa gatccagcgt gctgccgctg cagtggacct cggcatcaaa  
540  
gccactctag ctgcgacaat cattcccaac gcgctgcatt cagcggcatt caaggatgcg  
600  
gtggctgcaa atcttgtcgc cgccggctctg acaagaagtt ggcaaaggct acggctgtcg  
660  
ccattgccgc aactgcgctc aatcccgctc tcgggccgat cgcaaagact gaggccatta  
720  
aggctgagat c  
731

<210> 2088  
<211> 105  
<212> PRT  
<213> Homo sapiens

<400> 2088  
Met Ala Lys Glu Gly Val Leu Leu Ile Asn His His Lys Leu Lys Ala  
1 5 10 15  
Leu Ile Gly Ala Gln Val Gly Leu Leu Thr Asp Ala Lys Ile Gln Arg  
20 25 30  
Ala Ala Ala Val Asp Leu Gly Ile Lys Ala Thr Leu Ala Ala Thr  
35 40 45  
Ile Ile Pro Asn Ala Leu His Ser Ala Ala Phe Lys Asp Ala Val Val  
50 55 60  
Ala Asn Leu Val Ala Ala Gly Leu Thr Arg Ser Trp Gln Arg Leu Arg  
65 70 75 80  
Leu Ser Pro Leu Pro Gln Leu Arg Ser Ile Pro Leu Ser Gly Arg Ser  
85 90 95  
Gln Arg Leu Arg Pro Leu Arg Leu Arg  
100 105

<210> 2089  
<211> 315  
<212> DNA  
<213> Homo sapiens

<400> 2089  
accggtgtgg accaggctca gctgcgcgac gccatgtttt cctaccttcc ccaccacaag  
60



ctcggggaat tcgacatcga tctgttgctg gaccatcgcg attcccgtea gcccatcatc  
120  
ttcgacaccg accacttcga ggggtacgag cgcccccgcc tcgtgctgca cgaagtcacc  
180  
gatcaacttg gccaaagcgtt ccttgatttg gaaggcccag agccgggtctt cggctgggaa  
240  
tcgttggtgg cgtctctcac gagtcttgct gactctatgg ggatccgtct gaccggcatt  
300  
accgattcga tcccg  
315

<210> 2090  
<211> 105  
<212> PRT  
<213> Homo sapiens

<400> 2090  
Thr Gly Val Asp Gln Ala Gln Leu Arg Asp Ala Met Phe Ser Tyr Leu  
1 5 10 15  
Pro His His Lys Leu Gly Glu Phe Asp Ile Asp Leu Leu Leu Asp His  
20 25 30  
Arg Asp Ser Arg Gln Pro Ile Ile Phe Asp Thr Asp His Phe Glu Gly  
35 40 45  
Tyr Glu Arg Pro Arg Leu Val Leu His Glu Val Thr Asp Gln Leu Gly  
50 55 60  
Gln Ala Phe Leu Val Leu Glu Gly Pro Glu Pro Ala Leu Gly Trp Glu  
65 70 75 80  
Ser Leu Val Ala Ser Leu Thr Ser Leu Val Asp Ser Met Gly Ile Arg  
85 90 95  
Leu Thr Gly Ile Thr Asp Ser Ile Pro  
100 105

<210> 2091  
<211> 322  
<212> DNA  
<213> Homo sapiens

<400> 2091  
actcttgctc attgtctctg tctctgcggt tttctctctg tctctctgtg tctctgtctc  
60  
tgtgtccctg tccagttctg tnnctgtgtg tgcgcgcac tctctctgtg tctctgttng  
120  
agtctctgtc tcttttctct ctgtctctct ctgtgtctct gccattttg gtctctgctt  
180  
tctttctctg gtgtgtctct ccatttctgt ctctcttctt ctgtctctct ccatttctgt  
240  
ctctgtctct tttctctctg tgtgtctctt ttgtctctct gtttctctgc gtgtctctgt  
300  
ccatttctgt cccttcacgc gt  
322

<210> 2092  
<211> 107  
<212> PRT

<213> Homo sapiens

<400> 2092

```

Thr Leu Val His Cys Leu Cys Leu Cys Val Phe Leu Ser Val Ser Leu
 1           5           10           15
Cys Leu Cys Leu Cys Val Pro Val Gln Phe Cys Xaa Cys Val Cys Ala
      20           25           30
His Leu Ser Leu Cys Leu Cys Xaa Ser Leu Cys Leu Phe Cys Leu Cys
      35           40           45
Leu Ser Leu Cys Leu Cys Pro Phe Trp Ser Leu Leu Ser Phe Leu Cys
      50           55           60
Val Ser Leu His Phe Cys Leu Ser Ser Ser Val Ser Leu His Phe Cys
65           70           75           80
Leu Cys Ser Phe Ser Leu Cys Val Ser Leu Leu Ser Leu Cys Phe Ser
      85           90           95
Ala Cys Leu Cys Pro Phe Leu Ser Leu His Ala
      100           105

```

<210> 2093

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2093

```

gccggcggtca tgcaaacgat caaggtggcg caatttcgcc tctgccatag tcgaaaaatg
60
tttgtggtgg cctacccgcg agagaccag gagatggtgc tcgatgcgca taaccgcgcc
120
tttgcggttct ttggcggcgt accgcagcgg gttatctacg acaaccttaa aaccgcagtg
180
gatgcgatct tggtcggcaa ggatcgaatc ttcaaccggc gcttcctggc gttggctaatt
240
cattacctgt ttgaacctgt agcctgtacg cctgctgctg gctgggagaa gggccaagtt
300
gagaatcaag ttcgcaacat acgc
324

```

<210> 2094

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2094

```

Ala Gly Val Met Gln Thr Ile Lys Val Ala Gln Phe Arg Leu Cys His
 1           5           10           15
Ser Arg Lys Met Phe Val Val Ala Tyr Pro Arg Glu Thr Gln Glu Met
      20           25           30
Val Leu Asp Ala His Asn Arg Ala Phe Ala Phe Phe Gly Gly Val Pro
      35           40           45
Gln Arg Val Ile Tyr Asp Asn Leu Lys Thr Ala Val Asp Ala Ile Leu
      50           55           60
Val Gly Lys Asp Arg Ile Phe Asn Arg Arg Phe Leu Ala Leu Ala Asn
65           70           75           80
His Tyr Leu Phe Glu Pro Val Ala Cys Thr Pro Ala Ala Gly Trp Glu

```

85 90 95  
Lys Gly Gln Val Glu Asn Gln Val Arg Asn Ile Arg  
100 105

<210> 2095  
<211> 402  
<212> DNA  
<213> Homo sapiens

<400> 2095  
cccgtcacag accaggaaga agcagacaat atgacgctt ctttcgacac ttatgttcgc  
60  
accctgcccc ccgccgcaa tcttctgctt aaacaattcc atattgtgga tgttgcccg  
120  
cgcggtggtg gcgtgggttc agtgggcacc cactccctgg tactgctact gtcggcccc  
180  
aatgatgaac ctcttgctgt gcaagtgaag gaagccctcc ccagtgtcct caccacccat  
240  
gggaaactgc eggatgcttt ttcggaactg tccgctgggg actcctccgg gctcctcccc  
300  
gataatcttg ataagcatat taaagccggc aatggctacc ggggtggtggc gtgccagcag  
360  
attctgcagg cccactcgga tccgctgctg ggggtggacgc gt  
402

<210> 2096  
<211> 134  
<212> PRT  
<213> Homo sapiens

<400> 2096  
Pro Val Thr Asp Gln Glu Glu Ala Asp Asn Met Ile Ala Ser Phe Asp  
1 5 10 15  
Thr Tyr Val Arg Thr Leu Pro Pro Ala Ala Asn Leu Leu Leu Lys Gln  
20 25 30  
Phe His Ile Val Asp Val Ala Arg Arg Val Val Gly Val Gly Ser Val  
35 40 45  
Gly Thr His Ser Leu Val Leu Leu Leu Ser Gly Pro Asn Asp Glu Pro  
50 55 60  
Leu Val Leu Gln Val Lys Glu Ala Leu Pro Ser Val Leu Thr Thr His  
65 70 75 80  
Gly Lys Leu Pro Asp Ala Phe Ser Glu Leu Ser Ala Gly Asp Ser Ser  
85 90 95  
Gly Leu Leu Pro Asp Asn Leu Asp Lys His Ile Lys Ala Gly Asn Gly  
100 105 110  
Tyr Arg Val Val Ala Cys Gln Gln Ile Leu Gln Ala His Ser Asp Pro  
115 120 125  
Leu Leu Gly Trp Thr Arg  
130

<210> 2097  
<211> 641  
<212> DNA  
<213> Homo sapiens

<400> 2097  
 ncgtttctca cccgccctcc agcctcatca gcagctgtgg gctcaggccc ccctcccag  
 60  
 gcggagcagg cgtggccgca gagcagcggg gaggaggagc tgcagctcca gctggccctg  
 120  
 gccatgagca aggaggaggc cgaccaggta ctgggcgtgc agctggggct gtctgtccgc  
 180  
 caccgcctc cagcctcac ttcaggctcc ctcccagcca ggcgtgggccc tggccctcac  
 240  
 tgctgctgct ccacatgctg tcaactcgtct cctccccagt cctgcctcat cctcacnccg  
 300  
 ccgtccctct gcgtgtcact ctctgcctgt cctcactggg tcagggaccc ccagcctctc  
 360  
 tttattcggc tctatctgac cctggctctg cctctgactc tgcctctggc ccctcccgtc  
 420  
 atgccccctca cactctctct cccccagccc ccgtcctgcg gccccgagga cgacgcccag  
 480  
 ctccagctgg cccttagttt gagccgagaa gagcatgata aggtcagagc agcctccctg  
 540  
 tccctgcccc tgccaggggc tccctcaga ccagccccgt cgcctctcc taagtcaccc  
 600  
 cccaccatcc tgctgggccc gaagcccaca ggctcacgcg t  
 641

<210> 2098  
 <211> 213  
 <212> PRT  
 <213> Homo sapiens

<400> 2098  
 Xaa Phe Leu Thr Arg Pro Pro Ala Ser Ser Ala Ala Val Gly Ser Gly  
 1 5 10 15  
 Pro Pro Pro Glu Ala Glu Gln Ala Trp Pro Gln Ser Ser Gly Glu Glu  
 20 25 30  
 Glu Leu Gln Leu Gln Leu Ala Leu Ala Met Ser Lys Glu Glu Ala Asp  
 35 40 45  
 Gln Val Leu Gly Val Gln Leu Gly Leu Ser Val Arg His Pro Pro Pro  
 50 55 60  
 Arg Leu Thr Ser Gly Ser Leu Pro Ala Arg Arg Gly Pro Gly Pro His  
 65 70 75 80  
 Cys Arg Cys Ser Thr Cys Cys His Ser Ser Pro Pro Gln Ser Cys Leu  
 85 90 95  
 Ile Leu Thr Pro Pro Ser Leu Cys Val Ser Leu Ser Ala Cys Pro His  
 100 105 110  
 Trp Phe Arg Asp Pro Gln Pro Leu Phe Ile Arg Leu Tyr Leu Thr Leu  
 115 120 125  
 Ala Leu Pro Leu Thr Leu Pro Leu Ala Pro Pro Val Met Pro Leu Thr  
 130 135 140  
 Leu Ser Leu Pro Gln Pro Pro Ser Cys Gly Pro Glu Asp Asp Ala Gln  
 145 150 155 160  
 Leu Gln Leu Ala Leu Ser Leu Ser Arg Glu Glu His Asp Lys Val Arg  
 165 170 175  
 Ala Ala Ser Leu Ser Leu Pro Leu Pro Gly Ala Pro Leu Arg Pro Ala

180 185 190  
Pro Ser Pro Leu Pro Lys Ser Pro Pro Thr Ile Leu Leu Gly Pro Lys  
195 200 205  
Pro Thr Gly Ser Arg  
210

<210> 2099  
<211> 347  
<212> DNA  
<213> Homo sapiens

<400> 2099  
acgcgtgtgc cctgtccct gccagacatg gacagcacct gcccacaggg gtgctcagtg  
60  
gaggcagtgc ccagggtgc tgtgcccacg cgtgtaccct gtcctctgcc agacgcggac  
120  
agcacctgcc caggggtgc tcagtggagg cagtgccag ggctgctgtg cccacgtgtg  
180  
tgccctcaga catccctccc cagacacttg ctgcatgacc caggaggtgg caggcagtgg  
240  
cagtattctg ttcaggtgag ctgagaggtg gcaggtgcct ggctgcggcc ctgcctcact  
300  
ccgacagcct ctgcctccag tccactggct catccacat ggctga  
347

<210> 2100  
<211> 106  
<212> PRT  
<213> Homo sapiens

<400> 2100  
Met Asp Ser Thr Cys Pro Gln Gly Cys Ser Val Glu Ala Val Pro Arg  
1 5 10 15  
Ala Ala Val Pro Met Arg Val Pro Cys Pro Leu Pro Asp Ala Asp Ser  
20 25 30  
Thr Cys Pro Arg Gly Ala Gln Trp Arg Gln Cys Pro Gly Leu Leu Cys  
35 40 45  
Pro Arg Val Cys Pro Gln Thr Ser Leu Pro Arg His Leu Leu His Asp  
50 55 60  
Pro Gly Gly Gly Arg Gln Trp Gln Tyr Ser Val Gln Val Ser Ser Glu  
65 70 75 80  
Val Ala Gly Ala Trp Leu Arg Pro Cys Leu Thr Pro Thr Ala Ser Ala  
85 90 95  
Ser Ser Pro Leu Ala His Pro Thr Trp Pro  
100 105

<210> 2101  
<211> 549  
<212> DNA  
<213> Homo sapiens

<400> 2101  
ctctctccga ccgcgttgac ggtccagccg gtccgcacgc cgtcatcgga atcggcatca  
60

acgttttcgat ggggcgtgac gaattgcccc tgccgacggc gacctctctg gctctgtgtg  
120  
ggttgaacca cgacaagaat gagttgctgg ccagccttct catccacctt gacgagctat  
180  
taacagtgtg gttggagacc ggaacggtgc gggatcagta tgtggccgcg tgtgacacca  
240  
ttgggtactcc ggtccgtctg accttcgacc cagaaatcgt ggggtggtggg gagggggcca  
300  
ttgagggcat cgggtgctgac gttgacgttg atggcgctat cgtggtggaa acttctgacg  
360  
ggcgtcgcag tttcaacgct gctgacgttc atcatttgcg aaccaggtga gttccgctac  
420  
ggcgtcctga gcgttccac catctagact gctgactatg acgaccaca ttttggccct  
480  
tggtggtggc gggtttctcga tgtcgaaccg cggtgagcct accgctctcg accgtcacat  
540  
ccctgacct  
549

<210> 2102  
<211> 113  
<212> PRT  
<213> Homo sapiens

<400> 2102  
Met Gly Arg Asp Glu Leu Pro Leu Pro Thr Ala Thr Ser Leu Ala Leu  
1 5 10 15  
Cys Gly Leu Asn His Asp Lys Asn Glu Leu Leu Ala Ser Leu Leu Ile  
20 25 30  
His Leu Asp Glu Leu Leu Thr Val Trp Leu Glu Thr Gly Thr Val Arg  
35 40 45  
Asp Gln Tyr Val Ala Arg Cys Asp Thr Ile Gly Thr Pro Val Arg Leu  
50 55 60  
Thr Phe Asp Pro Glu Ile Val Gly Gly Gly Glu Gly Ala Ile Glu Gly  
65 70 75 80  
Ile Gly Val Asp Val Asp Val Asp Gly Ala Ile Val Val Glu Thr Ser  
85 90 95  
Asp Gly Arg Arg Ser Phe Asn Ala Ala Asp Val His His Leu Arg Thr  
100 105 110  
Arg

<210> 2103  
<211> 459  
<212> DNA  
<213> Homo sapiens

<400> 2103  
nnacgcgtga cttatacacc gggacgcaat gcgacggcaa cggcagagca cactatcgcc  
60  
atgattatgg cggcagtgcg acagatcccc gccaccatg agttactcgc ttcaggggtt  
120  
tgggagggggg acgcatatcg gtacgaccag gttggtatgg aaatcaaagg gaatgacgtc  
180

ggatcgtcg gatgcggagc ggtcgggtgc cgggttgagg ctgtgatggc ggccatgggt  
240  
gcgaccgtgc gtgtcttcga cccgtggggc actcctgatt cttttccagc tggcgtgatg  
300  
gcatgtgatg atctcgatga ggttctgagg ctccagccga tctcactct ccacgctcgt  
360  
gccaacgagg acaaccgtca catgattggc gttgaacaat tagctgagat gcctgatggc  
420  
tccgtctcgc tcaactgtgc ccgtggctcg ctggctcagc  
459

<210> 2104  
<211> 153  
<212> PRT  
<213> Homo sapiens

<400> 2104  
Xaa Arg Val Thr Tyr Thr Pro Gly Arg Asn Ala Thr Ala Thr Ala Glu  
1 5 10 15  
His Thr Ile Ala Met Ile Met Ala Ala Val Arg Gln Ile Pro Ala His  
20 25 30  
His Glu Leu Leu Ala Ser Gly Val Trp Glu Gly Asp Ala Tyr Arg Tyr  
35 40 45  
Asp Gln Val Gly Met Glu Ile Lys Gly Asn Asp Val Gly Ile Val Gly  
50 55 60  
Cys Gly Ala Val Gly Cys Arg Val Ala Ala Val Met Ala Ala Met Gly  
65 70 75 80  
Ala Thr Val Arg Val Phe Asp Pro Trp Ala Thr Pro Asp Ser Phe Pro  
85 90 95  
Ala Gly Val Met Ala Cys Asp Asp Leu Asp Glu Val Leu Arg Leu Ser  
100 105 110  
Arg Ile Leu Thr Leu His Ala Arg Ala Asn Glu Asp Asn Arg His Met  
115 120 125  
Ile Gly Val Glu Gln Leu Ala Glu Met Pro Asp Gly Ser Val Leu Val  
130 135 140  
Asn Cys Ala Arg Gly Ser Leu Val Asp  
145 150

<210> 2105  
<211> 4057  
<212> DNA  
<213> Homo sapiens

<400> 2105  
nnggaaaagc tccgtctagg gggccccag catgcctgga agtcttgtgc atctgcctag  
60  
agctgaagct ttgggtctgt cctggctttg ccaggcagcc agttttatct cctttgttca  
120  
cccctatatg gctccagtcg gttttggggg gggcagctaa gtgggggagg gggaacacaa  
180  
aagtttgggc aaaacattaa cctgacaaag cttgattccg gaaaaaatc cctcaagagc  
240  
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<211> 240  
<212> PRT  
<213> Homo sapiens

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Gln Ser Glu Leu Thr Asn Met Asp Leu Ala Ala Leu Phe Ser Asp Thr  
35 40 45  
Pro Ala Asn Ala Ser Gly Ser Ala Gly Gly Ser Asp Glu Ala Leu Asn  
50 55 60  
Ser Gly Ile Leu Thr Ile Asp Val Thr Ser Val Ser Ser Ser Leu Gly  
65 70 75 80  
Gly Asn Leu Pro Ala Asn Asn Ser Ser Leu Gly Pro Met Glu Pro Leu  
85 90 95  
Val Leu Val Ala His Ser Asp Ile Pro Pro Ser Leu Asp Ser Pro Leu  
100 105 110  
Val Leu Gly Thr Ala Ala Thr Val Leu Gln Gln Gly Ser Phe Ser Val  
115 120 125  
Asp Asp Val Gln Thr Val Ser Ala Gly Ala Leu Gly Cys Leu Val Ala  
130 135 140  
Leu Pro Met Lys Asn Leu Ser Asp Asp Pro Leu Ala Leu Thr Ser Asn  
145 150 155 160  
Ser Asn Leu Ala Ala His Ile Thr Thr Pro Thr Ser Ser Ser Thr Pro  
165 170 175  
Arg Glu Asn Ala Ser Val Pro Glu Leu Leu Ala Pro Ile Lys Val Glu  
180 185 190  
Pro Asp Ser Pro Ser Arg Pro Gly Ala Val Gly Gln Gln Glu Gly Ser  
195 200 205  
His Gly Leu Pro Gln Ser Thr Leu Pro Ser Pro Ala Glu Gln His Gly  
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Ala Gln Asp Thr Glu Leu Ser Ala Gly Thr Gly Asn Phe Tyr Leu Val

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 Ser Gly Leu Val Ser Glu Asn Thr Pro Arg Pro Asp Asp Ser Arg Ala  
 35 40 45  
 Ile Ala Pro Ala Ser Leu Gln Ile Thr Ser Ser Cys Ser Gly Glu Pro  
 50 55 60  
 Leu Asp Leu Asp Ser Lys Asp Val Ser Arg Pro Asp Ser Gln Gly Arg  
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<211> 233

<212> PRT

<213> Homo sapiens

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Gln	Ala	Lys	Ala	Thr	Lys	Arg	Lys	Tyr	Gln	Ala	Ser	Ser	Glu	Ala	Pro
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Ser	Val	Lys	Glu	Thr	Gln	Arg	Thr	Phe	Lys	Gly	Asn	Ala	Gln	Lys	Met
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Phe	Ser	Pro	Lys	Lys	His	Ser	Val	Ser	Thr	Ser	Asp	Arg	Asn	Gln	Glu
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Glu	Arg	Gln	Cys	Ile	Lys	Thr	Ser	Ser	Leu	Phe	Lys	Asn	Asn	Pro	Asp
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Ile	Pro	Glu	Leu	His	Arg	Pro	Val	Val	Lys	Gln	Val	Gln	Glu	Lys	Val
		115					120					125			
Phe	Thr	Ser	Ala	Ala	Phe	His	Glu	Leu	Gly	Leu	His	Pro	His	Leu	Ile
		130				135					140				
Ser	Thr	Ile	Asn	Thr	Val	Leu	Lys	Met	Ser	Ser	Met	Thr	Ser	Val	Gln
145					150					155				160	
Lys	Gln	Ser	Ile	Pro	Val	Leu	Leu	Glu	Gly	Arg	Asp	Ala	Leu	Val	Arg
			165					170						175	
Ser	Gln	Thr	Gly	Ser	Gly	Lys	Ile	Leu	Ala	Tyr	Cys	Ile	Pro	Val	Val
		180					185						190		
Gln	Ser	Leu	Gln	Ala	Met	Glu	Ser	Lys	Ile	Gln	Arg	Ser	Asp	Gly	Pro
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Tyr	Ala	Leu	Val	Leu	Val	Pro	Thr	Arg	Glu	Val	Ser	Arg	Leu	Pro	Phe
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<212> DNA  
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Gly Arg Gly Asn Lys Leu Ala Ile Ala Glu Leu Val Ala Leu Ala Glu  
35 40 45  
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Glu Arg Val Arg Ser Ala Leu Glu Arg Leu Arg Ala Gln Glu Arg Ala  
65 70 75 80  
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Leu Arg Gln Phe Pro Gly Asn Glu Val Asp Glu Ser Trp Thr Asp Ala  
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<212> DNA  
<213> Homo sapiens

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&lt;210&gt; 2114

&lt;211&gt; 758

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2114

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Gly	Asn	Pro	Leu	Asn	Pro	Lys	Ser	Lys	Gly	Lys	Leu	Thr	Leu	Asp	Ser
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Ser	Phe	Asn	Ile	Ala	Ser	Pro	Ala	Ser	Gln	Ala	Trp	Ile	Leu	His	Phe
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Cys	Gln	Lys	Leu	Arg	Asn	Gln	Thr	Phe	Phe	Tyr	Gln	Thr	Asp	Glu	Gln
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Asp	Phe	Thr	Ser	Cys	Phe	Ile	Glu	Thr	Phe	Lys	Gln	Trp	Met	Glu	Asn
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Gln	Asp	Cys	Asp	Glu	Pro	Ala	Leu	Tyr	Pro	Cys	Cys	Ser	His	Trp	Ser
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Phe	Pro	Tyr	Lys	Gln	Glu	Ile	Phe	Glu	Leu	Cys	Ile	Lys	Arg	Ala	Ile
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Met	Glu	Leu	Glu	Arg	Ser	Thr	Gly	Tyr	His	Leu	Asp	Ser	Lys	Thr	Pro
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Gly	Pro	Arg	Phe	Asp	Ile	Asn	Asp	Thr	Ile	Arg	Ala	Val	Val	Leu	Glu
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Phe	Tyr	Lys	Glu	Val	Asp	Ser	Trp	Ile	Ser	Ser	Glu	Leu	Ser	Ser	Ala
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Asp	Leu	Gln	Asp	Ser	Leu	Ser	Asp	Gly	Thr	Leu	Ile	Ala	Met	Gly	Leu
			210				215						220		
Ser	Val	Ala	Val	Ala	Phe	Ser	Val	Met	Leu	Leu	Thr	Thr	Trp	Asn	Ile

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Thr	Val	Gly	Ser	Leu	Val	Leu	Leu	Gly	Trp	Glu	Leu	Asn	Val	Leu	Glu
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Ser	Val	Thr	Ile	Ser	Val	Ala	Val	Gly	Leu	Ser	Val	Asp	Phe	Ala	Val
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His	Tyr	Gly	Val	Ala	Tyr	Arg	Leu	Ala	Pro	Asp	Pro	Asp	Arg	Glu	Gly
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Lys	Val	Ile	Phe	Ser	Leu	Ser	Arg	Val	Gly	Ser	Ala	Met	Ala	Met	Ala
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Ala	Leu	Thr	Thr	Phe	Val	Ala	Gly	Ala	Met	Met	Ile	Pro	Ser	Thr	Val
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Leu	Ala	Tyr	Thr	Gln	Leu	Gly	Thr	Phe	Met	Met	Leu	Ile	Met	Cys	Ile
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Ser	Trp	Ala	Phe	Ala	Thr	Phe	Phe	Phe	Gln	Cys	Met	Cys	Arg	Cys	Leu
		355					360					365			
Gly	Pro	Gln	Gly	Thr	Cys	Gly	Gln	Ile	Pro	Leu	Pro	Lys	Lys	Leu	Gln
		370				375					380				
Cys	Ser	Ala	Phe	Ser	His	Ala	Leu	Ser	Thr	Ser	Pro	Ser	Asp	Lys	Gly
385					390					395				400	
Gln	Ser	Lys	Thr	His	Thr	Ile	Asn	Ala	Tyr	His	Leu	Asp	Pro	Arg	Gly
				405					410					415	
Pro	Lys	Ser	Glu	Leu	Glu	His	Glu	Phe	Tyr	Glu	Leu	Glu	Pro	Leu	Ala
			420					425					430		
Ser	His	Ser	Cys	Thr	Ala	Pro	Glu	Lys	Thr	Thr	Tyr	Glu	Glu	Thr	His
			435					440					445		
Ile	Cys	Ser	Glu	Phe	Phe	Asn	Ser	Gln	Ala	Lys	Asn	Leu	Gly	Met	Pro
			450			455					460				
Val	His	Ala	Ala	Tyr	Asn	Ser	Glu	Leu	Ser	Lys	Ser	Thr	Glu	Ser	Asp
465					470					475				480	
Thr	Gly	Ser	Ala	Leu	Gln	Pro	Pro	Leu	Glu	Gln	His	Thr	Val	Cys	
				485				490					495		
His	Phe	Phe	Ser	Leu	Asn	Gln	Arg	Cys	Ser	Cys	Pro	Asp	Ala	Tyr	Lys
			500					505					510		
His	Leu	Asn	Tyr	Gly	Pro	His	Ser	Cys	Gln	Gln	Met	Gly	Asp	Cys	Leu
		515					520					525			
Cys	His	Gln	Cys	Ser	Pro	Thr	Ser	Ser	Phe	Val	Gln	Ile	Gln	Asn	
		530				535				540					
Gly	Val	Ala	Pro	Leu	Lys	Ala	Thr	His	Gln	Ala	Val	Glu	Gly	Phe	Val
545					550					555				560	
His	Pro	Ile	Thr	His	Ile	His	His	Cys	Pro	Cys	Leu	Gln	Gly	Arg	Val
				565				570						575	
Lys	Pro	Ala	Gly	Met	Gln	Asn	Ser	Leu	Pro	Arg	Asn	Phe	Phe	Leu	His
			580					585					590		
Pro	Val	Gln	His	Ile	Gln	Ala	Gln	Glu	Lys	Ile	Gly	Lys	Thr	Asn	Val
		595					600					605			
His	Ser	Leu	Gln	Arg	Ser	Ile	Glu	Glu	His	Leu	Pro	Lys	Met	Ala	Glu
		610				615				620					
Pro	Ser	Ser	Phe	Val	Cys	Arg	Ser	Thr	Gly	Ser	Leu	Leu	Lys	Thr	Cys
625					630					635				640	
Cys	Asp	Pro	Glu	Asn	Lys	Gln	Arg	Glu	Leu	Cys	Lys	Asn	Arg	Asp	Val
				645				650					655		
Ser	Asn	Leu	Glu	Ser	Ser	Gly	Gly	Thr	Glu	Asn	Lys	Ala	Gly	Gly	Lys



660 665 670  
 Val Glu Leu Ser Leu Ser Gln Thr Asp Ala Ser Val Asn Ser Glu His  
 675 680 685  
 Phe Asn Gln Asn Glu Pro Lys Val Leu Phe Asn His Leu Met Gly Glu  
 690 695 700  
 Ala Gly Cys Arg Ser Cys Pro Asn Asn Ser Gln Ser Cys Gly Arg Ile  
 705 710 715 720  
 Val Arg Val Lys Cys Asn Ser Val Asp Cys Gln Met Pro Asn Met Glu  
 725 730 735  
 Ala Asn Val Pro Ala Val Leu Thr His Ser Glu Leu Ser Gly Glu Ser  
 740 745 750  
 Leu Leu Ile Lys Thr Leu  
 755

&lt;210&gt; 2115

&lt;211&gt; 461

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2115

acgcgtctct ggctgggag cgggctcccc cgacacgcca ccttcctgc cagatggtgc  
 60  
 ttctgggtat tccagaatct ggaatggggg atgcctatcc ccctcctgag cccacctgct  
 120  
 ggtcttggtt ccttgaggcc caccaagtcc acaaccacct gctctgaata gaaagctgac  
 180  
 attgaaccga acagccgctt cggaggggga tatctgtgga gagctgtgac tgggagccgg  
 240  
 tgtgtgcctt tctgtggtca tttctcgagt cctctgccgg ctgctgccag gtgaaggcat  
 300  
 ctccatgccc agccggtggg cagctggggc ggggtggacct ccagcttctg cccgacgggg  
 360  
 ttcagatgac cgagatccta cgggattgcc aatgtgtggg gacggggggc tttcaggggc  
 420  
 gggaaaacat gtcccatcc gtgggaagtg gagccacgtg g  
 461

&lt;210&gt; 2116

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2116

Met Gly Thr Cys Phe Pro Ala Pro Glu Ser Pro Pro Ser Pro His Ile  
 1 5 10 15  
 Gly Asn Pro Val Gly Ser Arg Ser Ser Glu Pro Arg Arg Ala Glu Ala  
 20 25 30  
 Gly Gly Pro Pro Ala Pro Ala Ala His Arg Leu Gly Met Glu Met Pro  
 35 40 45  
 Ser Pro Gly Ser Ser Arg Gln Arg Thr Arg Glu Met Thr Thr Glu Arg  
 50 55 60  
 His Thr Pro Ala Pro Ser His Ser Ser Pro Gln Ile Ser Pro Ser Asp  
 65 70 75 80  
 Ala Ala Val Arg Phe Asn Val Ser Phe Leu Phe Arg Ala Gly Gly Cys

85 90 95  
Gly Leu Gly Gly Leu Gln Gly Pro Lys Thr Ser Arg Trp Ala Gln Glu  
100 105 110  
Gly Asp Arg His Pro Pro Phe Gln Ile Leu Glu Tyr Pro Glu Ala Pro  
115 120 125  
Ser Gly Arg Glu Gly Gly Val Ser Gly Glu Pro Ala Pro Arg Pro Glu  
130 135 140  
Thr Arg  
145

<210> 2117  
<211> 360  
<212> DNA  
<213> Homo sapiens

<400> 2117  
nnacgcgttg gggagacgac ggtgaccttc ccagcaagct catcgagga tgaaacaatc  
60  
cgcgccagcg ttaagacctt ctgcggggct gtcaccgccg atctggagaa gtgtggaccg  
120  
atcaggtgac actcgcggta gactgaatag atgcctgagt ctgaagacac tgtgtggctg  
180  
acccaagagg ccttcgataa gtcacccag gagctggagt acctcaaagg cgaaggccgc  
240  
accgtcattg ccaacaagat tgccgacgcc cggttcggaag gcgaccttc tgagaacggc  
300  
ggctaccatg ccgcccgtga ggagcagggg caggccgagg cccgcatccg tcaactcgag  
360

<210> 2118  
<211> 70  
<212> PRT  
<213> Homo sapiens

<400> 2118  
Met Pro Glu Ser Glu Asp Thr Val Trp Leu Thr Gln Glu Ala Phe Asp  
1 5 10 15  
Lys Leu Thr Gln Glu Leu Glu Tyr Leu Lys Gly Glu Gly Arg Thr Val  
20 25 30  
Ile Ala Asn Lys Ile Ala Asp Ala Arg Ser Glu Gly Asp Leu Ser Glu  
35 40 45  
Asn Gly Gly Tyr His Ala Ala Arg Glu Glu Gln Gly Gln Ala Glu Ala  
50 55 60  
Arg Ile Arg Gln Leu Glu  
65 70

<210> 2119  
<211> 465  
<212> DNA  
<213> Homo sapiens

<400> 2119  
nacgcgtgaa gggcgcgtgt cggcctctca ctggcgcagc ctgcactgcc gctgccgcct  
60

cgccccgcc ttgccttggc gttgtctctg gcaactgtggc ggactgacca cggccccgggc  
120  
atgggctgca agggagacgc gagcggagtt tgctataaaa tgggagttct ggttgctactc  
180  
actgttctgt ggctgttctc ctcaagtaaag gccgactcaa aagccattac aacctctctt  
240  
acaacaaaat gggtttccac tccattgttg ttagaagcca gtgagttttt agcagaagac  
300  
agtcaagaga aattttggaa tttttagaaa gccagtcaaa atattggatc atcagatcat  
360  
gacggtagcg attattccta ctatcatgca atattggagg ctgcatttca gtttctgtca  
420  
cccctccagc agaatttgtt taaattttgt ctgtcccttc acgcg  
465

&lt;210&gt; 2120

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2120

Met	Gly	Cys	Lys	Gly	Asp	Ala	Ser	Gly	Val	Cys	Tyr	Lys	Met	Gly	Val
1				5				10					15		
Leu	Val	Val	Leu	Thr	Val	Leu	Trp	Leu	Phe	Ser	Ser	Val	Lys	Ala	Asp
			20					25					30		
Ser	Lys	Ala	Ile	Thr	Thr	Ser	Leu	Thr	Thr	Lys	Trp	Phe	Ser	Thr	Pro
		35					40					45			
Leu	Leu	Leu	Glu	Ala	Ser	Glu	Phe	Leu	Ala	Glu	Asp	Ser	Gln	Glu	Lys
	50					55				60					
Phe	Trp	Asn	Phe	Val	Glu	Ala	Ser	Gln	Asn	Ile	Gly	Ser	Ser	Asp	His
65				70				75						80	
Asp	Gly	Thr	Asp	Tyr	Ser	Tyr	Tyr	His	Ala	Ile	Leu	Glu	Ala	Ala	Phe
			85					90						95	
Gln	Phe	Leu	Ser	Pro	Leu	Gln	Gln	Asn	Leu	Phe	Lys	Phe	Cys	Leu	Ser
			100					105						110	
Leu	His	Ala													
			115												

&lt;210&gt; 2121

&lt;211&gt; 336

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2121

ccggacaagg tcaatggaat gaaaacctcc cggccgacag acaatagtat aaatgttaca  
60  
tgtggctctc cttatgaaac taatggccct aaaacctttt acatttttgt agtcagaagt  
120  
ggaggttctt ttgttacaaa atacaacaag acaaactgtc agttttatgt agataatctc  
180  
tactattcaa ctgactatga gtttctgggc tcttttcaca atggagtgtg cgagggagat  
240  
tcagttataa gaaatgagtc aacaaatttt aatgctaaag ccctgattat attcctggtg  
300

tttctgatta ttgtgacatc aatagccttg cttggt  
336

<210> 2122  
<211> 112  
<212> PRT  
<213> Homo sapiens

<400> 2122  
Pro Asp Lys Val Asn Gly Met Lys Thr Ser Arg Pro Thr Asp Asn Ser  
1 5 10 15  
Ile Asn Val Thr Cys Gly Pro Pro Tyr Glu Thr Asn Gly Pro Lys Thr  
20 25 30  
Phe Tyr Ile Leu Val Val Arg Ser Gly Gly Ser Phe Val Thr Lys Tyr  
35 40 45  
Asn Lys Thr Asn Cys Gln Phe Tyr Val Asp Asn Leu Tyr Tyr Ser Thr  
50 55 60  
Asp Tyr Glu Phe Leu Val Ser Phe His Asn Gly Val Tyr Glu Gly Asp  
65 70 75 80  
Ser Val Ile Arg Asn Glu Ser Thr Asn Phe Asn Ala Lys Ala Leu Ile  
85 90 95  
Ile Phe Leu Val Phe Leu Ile Ile Val Thr Ser Ile Ala Leu Leu Val  
100 105 110

<210> 2123  
<211> 426  
<212> DNA  
<213> Homo sapiens

<400> 2123  
aactgggccc agttcggcaa cctgcacccc ttgcggcccg ccgagcaaag cgctgggttat  
60  
cagcaactga ccgacgaact ggaagcgatg ctctgcgccg ccacagggtta tgacgcgac  
120  
tccctgcagc cgaacgctgg ctcccagggc gactacgccg gtctgctggc gatccgcgct  
180  
taccaccaga gccgtggcga tgagcgtcgc gacatctgcc tgattccgtc ctctgcccac  
240  
ggcaccaacc cggcaaccgc caacatggcc ggcacgcgcg tggtcgtgac cgcttgccgac  
300  
gcccgcggca acgtcgacat cgaagacctg cgcgccaagg ctatcgagca ccgcgaacac  
360  
ctcgcggcgc tgatgatcac ctaccgctcg acccagggcg tgttcgaaga aggcacccgc  
420  
gagatc  
426

<210> 2124  
<211> 142  
<212> PRT  
<213> Homo sapiens

<400> 2124  
Asn Trp Ala Glu Phe Gly Asn Leu His Pro Phe Ala Pro Ala Glu Gln

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      1           5           10           15
Ser Ala Gly Tyr Gln Gln Leu Thr Asp Glu Leu Glu Ala Met Leu Cys
      20           25           30
Ala Ala Thr Gly Tyr Asp Ala Ile Ser Leu Gln Pro Asn Ala Gly Ser
      35           40           45
Gln Gly Glu Tyr Ala Gly Leu Leu Ala Ile Arg Ala Tyr His Gln Ser
      50           55           60
Arg Gly Asp Glu Arg Arg Asp Ile Cys Leu Ile Pro Ser Ser Ala His
      65           70           75           80
Gly Thr Asn Pro Ala Thr Ala Asn Met Ala Gly Met Arg Val Val Val
      85           90           95
Thr Ala Cys Asp Ala Arg Gly Asn Val Asp Ile Glu Asp Leu Arg Ala
      100          105          110
Lys Ala Ile Glu His Arg Glu His Leu Ala Ala Leu Met Ile Thr Tyr
      115          120          125
Pro Ser Thr His Gly Val Phe Glu Glu Gly Ile Arg Glu Ile
      130          135          140

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&lt;210&gt; 2125

&lt;211&gt; 285

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2125

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ngtatggcat ctgctgcttc aagttttgtg gtgacaccaa atgtcacttc taacacaacc
60
acagtcaagc ccaatatggt tatgttacct attcaaaaca caagagggttc aagattgggt
120
ctaaaggcgg ctgaagacgc ggcaccaccg gctgtcaccg ttgaagcggc caaggaagag
180
aagccgaagc caccaccaat tggacctaaag agaggagcca aggtgagaat tcttaggaag
240
gagtcatact gggtcaaagg agtgggatca gttgtgactg ttgat
285

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&lt;210&gt; 2126

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2126

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Xaa Met Ala Ser Ala Ala Ser Ser Phe Val Val Thr Pro Asn Val Thr
      1           5           10           15
Ser Asn Thr Thr Thr Val Lys Pro Asn Met Val Met Leu Pro Ile Gln
      20           25           30
Asn Thr Arg Gly Ser Arg Leu Val Leu Lys Ala Ala Glu Asp Ala Ala
      35           40           45
Pro Pro Ala Val Thr Val Glu Ala Ala Lys Glu Glu Lys Pro Lys Pro
      50           55           60
Pro Pro Ile Gly Pro Lys Arg Gly Ala Lys Val Arg Ile Leu Arg Lys
      65           70           75           80
Glu Ser Tyr Trp Phe Lys Gly Val Gly Ser Val Val Thr Val Asp
      85           90           95

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<210> 2127  
<211> 454  
<212> DNA  
<213> Homo sapiens

<400> 2127  
atggcagcca agatgcttgc attgttcgct ctcctagctc tttgtgcaag cgccactagt  
60  
gcgacgcata ttccagggca cttgtcacca gtcatgccat tgggtaccat gaacccatgc  
120  
atgcagtact gcatgatgca acaggggctt gccagcttga tggcgtgtcc gtccctgatg  
180  
ctgcagcaac tgttggcctt accgcttcag acgatgccag tgatgatgcc acagatgatg  
240  
acgcctaaca tgatgtcacc attgatgatg ccgagcatga tgtcaccaat ggtcttgccg  
300  
agcatgatgt cgcaaatgat gatgccacaa tgtcactgcg acgccgtctc gcagattatg  
360  
ctgcaacagc agttaccatt catgttcaac ccaatggcca tgacgattcc acccatgttc  
420  
ttacagcaac cctttgttgg tgctgcattc taga  
454

<210> 2128  
<211> 150  
<212> PRT  
<213> Homo sapiens

<400> 2128  
Met Ala Ala Lys Met Leu Ala Leu Phe Ala Leu Leu Ala Leu Cys Ala  
1 5 10 15  
Ser Ala Thr Ser Ala Thr His Ile Pro Gly His Leu Ser Pro Val Met  
20 25 30  
Pro Leu Gly Thr Met Asn Pro Cys Met Gln Tyr Cys Met Met Gln Gln  
35 40 45  
Gly Leu Ala Ser Leu Met Ala Cys Pro Ser Leu Met Leu Gln Gln Leu  
50 55 60  
Leu Ala Leu Pro Leu Gln Thr Met Pro Val Met Met Pro Gln Met Met  
65 70 75 80  
Thr Pro Asn Met Met Ser Pro Leu Met Met Pro Ser Met Met Ser Pro  
85 90 95  
Met Val Leu Pro Ser Met Met Ser Gln Met Met Met Pro Gln Cys His  
100 105 110  
Cys Asp Ala Val Ser Gln Ile Met Leu Gln Gln Gln Leu Pro Phe Met  
115 120 125  
Phe Asn Pro Met Ala Met Thr Ile Pro Pro Met Phe Leu Gln Gln Pro  
130 135 140  
Phe Val Gly Ala Ala Phe  
145 150

<210> 2129  
<211> 354  
<212> DNA  
<213> Homo sapiens

<400> 2129  
acgcgtgact tggatgaaca acccatatcc atcaccctt tcggtgttga tacggaaata  
60  
ctcacgccct ttgacaagcg gcgtgatgcg aacggcggtg acgggggtgg gcgcacggg  
120  
actatcaagg ctctccactc caaatatggg atcgggtgaac tcatccgtgc cttcagtcgg  
180  
gtccatgatg aacggcctaa taccgtcctt cgtatctggg gcggcgggcc agacgagaat  
240  
cccctcaagg tcttggctcg ccgtcttgc cggacgggtt cgggtggagt tcgcggtgcc  
300  
attgatcatt ctgaggtcag aaatgccttg ggtagtttgg acatctttgc cgcc  
354

<210> 2130  
<211> 118  
<212> PRT  
<213> Homo sapiens

<400> 2130  
Thr Arg Asp Leu Val Asn Lys Pro Ile Ser Ile Thr Pro Phe Gly Val  
1 5 10 15  
Asp Thr Glu Ile Leu Thr Pro Phe Asp Lys Arg Arg Asp Ala Asn Gly  
20 25 30  
Gly Asp Gly Val Val Arg Ile Gly Thr Ile Lys Ala Leu His Ser Lys  
35 40 45  
Tyr Gly Ile Gly Glu Leu Ile Arg Ala Phe Ser Arg Val His Asp Glu  
50 55 60  
Arg Pro Asn Thr Val Leu Arg Ile Trp Gly Gly Gly Pro Asp Glu Asn  
65 70 75 80  
Pro Leu Lys Val Leu Ala Arg Arg Leu Val Pro Asp Gly Ser Val Glu  
85 90 95  
Phe Arg Gly Ala Ile Asp His Ser Glu Val Arg Asn Ala Leu Gly Ser  
100 105 110  
Leu Asp Ile Phe Ala Ala  
115

<210> 2131  
<211> 324  
<212> DNA  
<213> Homo sapiens

<400> 2131  
gcatcgcggc cattgggttat gtgtgcctat tccattgggt atgtggaagg ttgggatcag  
60  
ccagacagtc attatgatgg tttgttacag ctgggcgagt ggggctttcg aatcaatgac  
120  
ctgatgaaga cggtagaggg cgcggcaggg tgcattgagt attatgaaat gctcaacgaa  
180  
caacgccccg acttgtctta tgacatagac ggtattgttt ataaagttga tcagattgac  
240  
ctgcaagaag agcttggttt tattgtcgt gcgccacgct gggcaattgc tcgaaaattt  
300

cctgctcaag aagaagttac gcgt  
324

<210> 2132  
<211> 108  
<212> PRT  
<213> Homo sapiens

<400> 2132  
Ala Ser Arg Pro Leu Val Met Cys Ala Tyr Ser Ile Gly Tyr Val Glu  
1 5 10 15  
Gly Trp Asp Gln Pro Asp Ser His Tyr Asp Gly Leu Leu Gln Leu Gly  
20 25 30  
Glu Trp Gly Phe Arg Ile Asn Asp Leu Met Lys Thr Val Glu Gly Ala  
35 40 45  
Ala Gly Cys Ile Glu Tyr Tyr Glu Met Leu Asn Glu Gln Arg Pro Asp  
50 55 60  
Leu Ser Tyr Asp Ile Asp Gly Ile Val Tyr Lys Val Asp Gln Ile Asp  
65 70 75 80  
Leu Gln Glu Glu Leu Gly Phe Ile Ala Arg Ala Pro Arg Trp Ala Ile  
85 90 95  
Ala Arg Lys Phe Pro Ala Gln Glu Glu Val Thr Arg  
100 105

<210> 2133  
<211> 292  
<212> DNA  
<213> Homo sapiens

<400> 2133  
ggtacctgca atatggtatt gcatgacatg aataaatttt tccttactct gaactcacta  
60  
gtggtgtgtct ttagaggacc cggcgaactt ttctgtcttt ttcccacttg ctccatcaca  
120  
tacatcacat caccaacacc catcacatac atacacagtc atgaacggcc atcaggccac  
180  
accagattac atcgtgtgtg atccaaccct gcatttttctt gccctctctt tactgcgagt  
240  
gtcacctcta cccggaagg tcttcaacct ccaagtttcc cagtaattta tt  
292

<210> 2134  
<211> 93  
<212> PRT  
<213> Homo sapiens

<400> 2134  
Met Val Leu His Asp Met Asn Lys Phe Phe Leu Thr Leu Asn Ser Leu  
1 5 10 15  
Val Ala Val Phe Arg Gly Pro Gly Glu Leu Phe Leu Leu Phe Pro Thr  
20 25 30  
Cys Ser Ile Thr Tyr Ile Thr Ser Pro Thr Pro Ile Thr Tyr Ile His  
35 40 45  
Ser His Glu Arg Pro Ser Gly His Thr Arg Leu His Arg Cys Gly Ser



50                      55                      60  
 Asn Pro Ala Phe Ser Cys Pro Ser Phe Thr Ala Ser Val Thr Ser Thr  
 65                      70                      75                      80  
 Arg Lys Gly Leu Gln Pro Pro Ser Phe Pro Val Ile Tyr  
                     85                      90

<210> 2135  
 <211> 439  
 <212> DNA  
 <213> Homo sapiens

<400> 2135  
 acgcgttcca ttggtgtgtc gaatttcaag accgagcatc tggacgccat cgagggggcc  
 60  
 actccgagcg tcgaccaaact cgagatgcat ccctcgttca accagggcgac cttccgcgca  
 120  
 gagctggccg agcgcggcat taaccgggag gcctggagcc cgctggggcca gtcgaaggac  
 180  
 ctcgacaatc ccgtcctcac cgatatattcc aaggcgactg gaaagacgcc tgcccagggtg  
 240  
 gtcattcgct ggcacctgca gatcggcaac gtggtattcc ccaagtcggt gacaccatca  
 300  
 cgaattgccg agaactttga tgtgttcgat ttcgagctgt ctgacgagca gatcgccgca  
 360  
 attgatggcc tggatcacgg caacaggctc ggtggtgacc cttctaccgc cgacttctga  
 420  
 ttctgcaaca ataaccggt  
 439

<210> 2136  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 2136  
 Thr Arg Ser Ile Gly Val Ser Asn Phe Lys Thr Glu His Leu Asp Ala  
 1                      5                      10                      15  
 Ile Glu Gly Ala Thr Pro Ser Val Asp Gln Ile Glu Met His Pro Ser  
                     20                      25                      30  
 Phe Asn Gln Ala Thr Phe Arg Ala Glu Leu Ala Glu Arg Gly Ile Asn  
                     35                      40                      45  
 Pro Glu Ala Trp Ser Pro Leu Gly Gln Ser Lys Asp Leu Asp Asn Pro  
                     50                      55                      60  
 Val Leu Thr Asp Ile Ser Lys Ala Thr Gly Lys Thr Pro Ala Gln Val  
 65                      70                      75                      80  
 Val Ile Arg Trp His Leu Gln Ile Gly Asn Val Val Phe Pro Lys Ser  
                     85                      90                      95  
 Val Thr Pro Ser Arg Ile Ala Glu Asn Phe Asp Val Phe Asp Phe Glu  
                     100                      105                      110  
 Leu Ser Asp Glu Gln Ile Ala Ala Ile Asp Gly Leu Asp His Gly Asn  
                     115                      120                      125  
 Arg Leu Gly Gly Asp Pro Ser Thr Ala Asp Phe  
                     130                      135

<210> 2137  
<211> 330  
<212> DNA  
<213> Homo sapiens

<400> 2137  
nncctttgcc ttggtgata ccctcaccac ctgggaacat ccccagaca ccctcttaac  
60  
tccgggacag agatggctgg cggagcctgg ggccgcctgg cctgttactt ggagttcctg  
120  
aagaaggagg agctgaagga gttccagctt ctgctcgcca ataaagcgca ctccaggagc  
180  
tcttccggtg agacacccgc tcagccagag aagacgagtg gcatggaggt ggcctcgtac  
240  
ctggtggctc agtatgggga gcagcgggccc tgggacctag ccctccatac ctgggagcag  
300  
atggggctga ggtcactgtg cgcccaagcc  
330

<210> 2138  
<211> 86  
<212> PRT  
<213> Homo sapiens

<400> 2138  
Met Ala Gly Gly Ala Trp Gly Arg Leu Ala Cys Tyr Leu Glu Phe Leu  
1 5 10 15  
Lys Lys Glu Glu Leu Lys Glu Phe Gln Leu Leu Leu Ala Asn Lys Ala  
20 25 30  
His Ser Arg Ser Ser Ser Gly Glu Thr Pro Ala Gln Pro Glu Lys Thr  
35 40 45  
Ser Gly Met Glu Val Ala Ser Tyr Leu Val Ala Gln Tyr Gly Glu Gln  
50 55 60  
Arg Ala Trp Asp Leu Ala Leu His Thr Trp Glu Gln Met Gly Leu Arg  
65 70 75 80  
Ser Leu Cys Ala Gln Ala  
85

<210> 2139  
<211> 433  
<212> DNA  
<213> Homo sapiens

<400> 2139  
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60  
gtgaacaagc tggcgagtac catcgcccag tacaacgatac agatttccaa agtcaccacc  
120  
gccgcccgtg ccccgaacga cctgctggac cagcgcagcg aggcggtgcg ccagttgtcc  
180  
gagctggctg ggaccaggt ggtccagcgc ggttcgagtt atgacgtcta tatcggcagc  
240  
ggtcagcgcc tggatgaggg caacagcacc aacaccctgt ccgcagtgcc gagcaaggac  
300

gacccgagcc agtcggcctt gcagctggat cgcggcacca gcaccgtcga tatcacctcc  
360  
acggtgaccg gtggcgagat cgggtggtctg ctgcgctatc gcagcgatgt gctcgaccg  
420  
tcgatcaacg cgt  
433

<210> 2140  
<211> 144  
<212> PRT  
<213> Homo sapiens

<400> 2140  
Glu Gln Leu Ser Ala Gln Asn Thr Gly Ile Asn Ser Asn Leu Ser Asp  
1 5 10 15  
Met Ala Gly Gln Val Asn Lys Leu Ala Ser Thr Ile Ala Gln Tyr Asn  
20 25 30  
Asp Gln Ile Ser Lys Val Thr Thr Ala Ala Gly Ala Pro Asn Asp Leu  
35 40 45  
Leu Asp Gln Arg Ser Glu Ala Val Arg Gln Leu Ser Glu Leu Val Gly  
50 55 60  
Thr Gln Val Val Gln Arg Gly Ser Ser Tyr Asp Val Tyr Ile Gly Ser  
65 70 75 80  
Gly Gln Arg Leu Val Met Gly Asn Ser Thr Asn Thr Leu Ser Ala Val  
85 90 95  
Pro Ser Lys Asp Asp Pro Ser Gln Ser Ala Leu Gln Leu Asp Arg Gly  
100 105 110  
Thr Ser Thr Val Asp Ile Thr Ser Thr Val Thr Gly Gly Glu Ile Gly  
115 120 125  
Gly Leu Leu Arg Tyr Arg Ser Asp Val Leu Asp Pro Ser Ile Asn Ala  
130 135 140

<210> 2141  
<211> 426  
<212> DNA  
<213> Homo sapiens

<400> 2141  
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gtttatcctt atctttcttt ccgcttgatc aatgatatgg tggataaagg cgaagtgtta  
120  
ggtgacccaa ttgcttgta tggttaatat cgtaaaggta ttaacaaagg cttgatgaaa  
180  
atcctgtcta aaatgggtat ttcaacgatt gcctcttata gtggtgcgca attgtttgaa  
240  
gcggttggtc tggataactaa agtggtcgac ctttgtttca aaggcgttgc aagtcgtatc  
300  
aaaggtgctc gttttgaaga tttccagcgt gatcaagcaa cgattgccaa taatgcttgg  
360  
aagttacgta aacctattca acagggcggt tatcttaaata acgtacatga ctctgagtat  
420  
cacgcg  
426

<210> 2142  
 <211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 2142  
 Xaa Tyr Pro Cys Ser Asp Pro His Gln Phe Ala Val Leu Leu Gly Phe  
 1 5 10 15  
 Gly Ala Thr Ala Val Tyr Pro Tyr Leu Ser Phe Arg Leu Ile Asn Asp  
 20 25 30  
 Met Val Asp Lys Gly Glu Val Leu Gly Asp Pro Ile Ala Cys His Val  
 35 40 45  
 Lys Tyr Arg Lys Gly Ile Asn Lys Gly Leu Met Lys Ile Leu Ser Lys  
 50 55 60  
 Met Gly Ile Ser Thr Ile Ala Ser Tyr Arg Gly Ala Gln Leu Phe Glu  
 65 70 75 80  
 Ala Val Gly Leu Asp Thr Lys Val Val Asp Leu Cys Phe Lys Gly Val  
 85 90 95  
 Ala Ser Arg Ile Lys Gly Ala Arg Phe Glu Asp Phe Gln Arg Asp Gln  
 100 105 110  
 Ala Thr Ile Ala Asn Asn Ala Trp Lys Leu Arg Lys Pro Ile Gln Gln  
 115 120 125  
 Gly Gly Tyr Leu Lys Tyr Val His Asp Ser Glu Tyr His Ala  
 130 135 140

<210> 2143  
 <211> 1008  
 <212> DNA  
 <213> Homo sapiens

<400> 2143  
 gccggcttga caagcatgtt caccggtgac gctgtcgtga tcgtcgaggt gagccaattg  
 60  
 tgtcatattg tacgcagtat gtcttttcaa cgattcttgg cgggggtggc agccatcttg  
 120  
 cttctcctgc ctactgcgtg cgtgatgat gcgcaggcgc ccgttgctga taacctcggg  
 180  
 acggtcctca gccctccaa ctccctcatt cgcgagccgg cgaattcgtc agtcaacggg  
 240  
 acgctcaaga gcacatatga gtacctcgg ctcacgacg gtcacgatct acccgacgac  
 300  
 gatggctacg ctcatgatca tctggtcgcg gctttgcgcc cgtatttggt gaatggtgga  
 360  
 gacagtcggc aggcccacgt caccctaact atggcggcgt catccctgaa aacctcaac  
 420  
 gcgttgctcg acaaggagag atcagaggtc gacaaacgta ccgcctgcc gaagggtgc  
 480  
 atcacgagaa agacggtgat gacggatctg cccatcgca cgatgaggcg ggagatcggc  
 540  
 ctgtccaacg acgggttggt cctcacaccg tggaaggta agacgacttc ttccgaggag  
 600  
 gctcgggtgg cgatgcaggc gctggccagt gccgacctat tcagcaatgc taaggacgcc  
 660

gagaaatggg ggtgggagtc gatctcggac ggggtatttgc gccatctcga gacctacagt  
 720  
 ggccccagta cgactatcgc gatggccttg tcggcggcga ataccgtctc tacattgtct  
 780  
 cgttcccagt tgcaacgcat cggcgacagt ctcgcggatg cgccatatcc gaggaaggac  
 840  
 cttgggtccg cgctcattcg caatggaaag ccggtcaagg acaagtgcag tatcgaatcg  
 900  
 gcgtacctgt tgaggtattc cgggaattgg gcgtggtgac atgacgggtt cttggcaagg  
 960  
 tgtgaccaag acattcccct cgggcgattc cgcgctggg ggggtgcac  
 1008

<210> 2144

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2144

Met	Phe	Thr	Gly	Asp	Ala	Val	Val	Ile	Val	Glu	Val	Ser	Gln	Leu	Cys
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His	Ile	Val	Arg	Ser	Met	Ser	Phe	Gln	Arg	Phe	Leu	Ala	Gly	Val	Ala
			20					25					30		
Ala	Ile	Leu	Leu	Leu	Leu	Pro	Thr	Ala	Cys	Ala	Asp	Asp	Ala	Gln	Ala
		35					40					45			
Pro	Val	Val	Asp	Asn	Leu	Gly	Thr	Val	Leu	Ser	Pro	Ser	Asn	Ser	Leu
		50				55					60				
Ile	Arg	Glu	Pro	Ala	Asn	Ser	Ser	Val	Asn	Gly	Thr	Leu	Lys	Ser	Thr
65					70				75					80	
Tyr	Glu	Tyr	Leu	Arg	Leu	Ile	Asp	Gly	His	Asp	Leu	Pro	Asp	Asp	Asp
			85					90					95		
Gly	Tyr	Ala	His	Asp	His	Leu	Val	Ala	Ala	Leu	Arg	Pro	Tyr	Leu	Val
			100					105					110		
Asn	Gly	Gly	Asp	Ser	Arg	Gln	Ala	His	Val	Thr	Gln	Leu	Met	Ala	Ala
		115					120					125			
Ser	Ser	Leu	Lys	Thr	Leu	Asn	Ala	Leu	Ser	Asp	Lys	Glu	Arg	Ser	Glu
		130				135					140				
Val	Asp	Lys	Arg	Thr	Arg	Leu	Pro	Lys	Gly	Cys	Ile	Thr	Arg	Lys	Thr
145					150				155					160	
Val	Met	Thr	Asp	Leu	Pro	Ile	Ala	Thr	Met	Arg	Arg	Glu	Ile	Gly	Leu
			165					170					175		
Ser	Asn	Asp	Gly	Leu	Cys	Leu	Thr	Pro	Trp	Lys	Val	Lys	Thr	Thr	Ser
		180						185					190		
Ser	Glu	Glu	Ala	Arg	Trp	Ala	Met	Gln	Ala	Leu	Ala	Ser	Ala	Asp	Leu
		195				200						205			
Phe	Ser	Asn	Ala	Lys	Asp	Ala	Glu	Lys	Trp	Gly	Trp	Glu	Ser	Ile	Ser
		210				215					220				
Asp	Gly	Tyr	Leu	Arg	His	Leu	Glu	Thr	Tyr	Ser	Gly	Pro	Ser	Thr	Thr
225					230				235					240	
Ile	Ala	Met	Ala	Leu	Ser	Ala	Ala	Asn	Thr	Val	Ser	Thr	Leu	Ser	Arg
			245					250					255		
Ser	Gln	Leu	Gln	Arg	Ile	Gly	Asp	Ser	Leu	Ala	Asp	Ala	Pro	Tyr	Pro
		260					265					270			
Arg	Lys	Asp	Leu	Gly	Pro	Ala	Leu	Ile	Arg	Asn	Gly	Lys	Pro	Val	Lys

275 280 285  
Asp Lys Cys Ser Ile Glu Ser Ala Tyr Leu Leu Arg Tyr Ser Gly Asn  
290 295 300  
Trp Ala Trp  
305

<210> 2145  
<211> 389  
<212> DNA  
<213> Homo sapiens

<400> 2145  
tctagaatcg tgtataacat tctacacaat aagctaagcc tactcttgta gagtgcgac  
60  
atgacaaccc ttgaacaatc attatctcaa attcccgcac ttctgattat tcatgaacat  
120  
ttatttagct cggcccagcc ttctgctgaa caactaaaat tgattaaaga gtttggttgt  
180  
agcacagtca ttaaccttgc tttaactaat gcttcaaadc atcttgagaa tgaagaccgt  
240  
atttgtttag accttggttt aaattatatt catattccaa ttgattggga gatgccttct  
300  
gctgagcagt gcttattagt tttagatttg attgatcatt tagtgcaaaa tgaaattgtt  
360  
tggtacatt gcgcacaaaa taaacgcgt  
389

<210> 2146  
<211> 109  
<212> PRT  
<213> Homo sapiens

<400> 2146  
Met Thr Thr Leu Glu Gln Ser Leu Ser Gln Ile Pro Ala Phe Ser Ile  
1 5 10 15  
Ile His Glu His Leu Phe Ser Ser Ala Gln Pro Ser Ala Glu Gln Leu  
20 25 30  
Lys Leu Ile Lys Glu Phe Gly Cys Ser Thr Val Ile Asn Leu Ala Leu  
35 40 45  
Thr Asn Ala Ser Asn His Leu Glu Asn Glu Asp Arg Ile Cys Leu Asp  
50 55 60  
Leu Gly Leu Asn Tyr Ile His Ile Pro Ile Asp Trp Glu Met Pro Ser  
65 70 75 80  
Ala Glu Gln Cys Leu Leu Val Leu Asp Leu Ile Asp His Leu Val Gln  
85 90 95  
Asn Glu Ile Val Trp Ile His Cys Ala Lys Asn Lys Arg  
100 105

<210> 2147  
<211> 235  
<212> DNA  
<213> Homo sapiens

<400> 2147

ctccctgcgg gctgcgtctc cgaggacatg tgcagtcctg acccctgttt caatgggtggg  
60  
acttgccctcg tcacctggaa tgacttccac tgtacctgcc ctgccaattt cacggggcct  
120  
acatgtgccc agcagctgtg gtgtcccggc cagccctgtc tcccacctgc cacgtgtgtg  
180  
gcggaggcca cgttccgcga ggggtcccccc gccgcgttca gcgggcacaa cgcgt  
235

<210> 2148  
<211> 78  
<212> PRT  
<213> Homo sapiens

<400> 2148  
Leu Pro Ala Gly Cys Val Ser Glu Asp Met Cys Ser Pro Asp Pro Cys  
1 5 10 15  
Phe Asn Gly Gly Thr Cys Leu Val Thr Trp Asn Asp Phe His Cys Thr  
20 25 30  
Cys Pro Ala Asn Phe Thr Gly Pro Thr Cys Ala Gln Gln Leu Trp Cys  
35 40 45  
Pro Gly Gln Pro Cys Leu Pro Pro Ala Thr Cys Val Ala Glu Ala Thr  
50 55 60  
Phe Arg Glu Gly Pro Pro Ala Ala Phe Ser Gly His Asn Ala  
65 70 75

<210> 2149  
<211> 1474  
<212> DNA  
<213> Homo sapiens

<400> 2149  
ntactgccac cattggaact tttgatgttg atggggaaga gttgcaacac ctccagggtt  
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gtcctgctga tgggtggctgc gaatgatttg ccttgacaat agctgaaaaa ccaccatctg  
120  
caacacgtgg gagtaagact tctcctgctc tttgccagtg gtctgaggtg atgaaccacc  
180  
ctggccttgggt gtgctgtgtc cagcaaacta caggggtgcc gctggtagtt atgggtgaaac  
240  
cagacacttt tcttatccac gagattaaga ctcttctgc taaagcgaag atccaagaca  
300  
tggttgctat taggcacacg gcctgcaatg agcagcagcg gacaacaatg attctgtctg  
360  
gtgaggatgg cagcctgcgc atttacatgg ccaacgtgga gaacacctcc tactggctgc  
420  
agccatccct gcagcccagc agtgtcatca gcatcatgaa gcctgttcga aagcgcaaaa  
480  
cagctacaat cacaaccng cacgtctagc caggtgactt tccccattga cttttttgaa  
540  
cacaaccagc agctgacaga tgtggagttt ggtggtaacg acctcctaca ggtctataat  
600  
gcacaacaga taaaacaccg gctgaattcc actggcatgt atgtggccaa caccaagccc  
660

ggaggcttca ccattgagat tagtaacaac aatagcacta tggatgatgac aggcattgcgg  
720  
atccagattg ggactcaagc aatagaacgg gccccgtcat atatcgagat cttcggcaga  
780  
actatgcagc tcaacctgag tcgctcacgc tggtttgact tccccctcac cagagaagaa  
840  
gccctgcagg ctgataagaa gctgaacctc ttcattgggg cctcggtgga tccagcaggt  
900  
gtcaccatga tagatgctgt aaaaatttat ggcaagacta aggagcagtt tggctggcct  
960  
gatgagcccc cagaagaatt cccttctgcc tctgtcagca acatctgccc ttcaaactctg  
1020  
aaccagagca acggcactgg agatagcgac tcagctgccc ccactacgac cagtgggaact  
1080  
gtcctggaga ggctgggtgt gagttcttta gaagccctgg aaagctgctt tgccgttggc  
1140  
ccaatcatcg agaaggagag aaacaagaat gctgctcagg agctggccac tttgctgttg  
1200  
tccctgccag cacctgccag tgtccagcag cagtccaaga gccttctggc cagcctgcac  
1260  
accagccgct cggcctacca cagccacaag gtaactgttc tctcagggaa aggaaattgc  
1320  
agtgtgaca gggaatcaaa taagttagct cttcattgta aagcaacagc acagcaaagt  
1380  
aaggtagagg gaggatagca ttcagattag acctacattt tacagagttt ctctgagaa  
1440  
attctcaagt gccactcaaa actgagggtg agcc  
1474

&lt;210&gt; 2150

&lt;211&gt; 312

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2150

Ser	Leu	Phe	Glu	Ser	Ala	Lys	Gln	Leu	Gln	Ser	Gln	Pro	Xaa	Thr	Ser
1				5				10						15	
Ser	Gln	Val	Thr	Phe	Pro	Ile	Asp	Phe	Phe	Glu	His	Asn	Gln	Gln	Leu
		20					25					30			
Thr	Asp	Val	Glu	Phe	Gly	Gly	Asn	Asp	Leu	Leu	Gln	Val	Tyr	Asn	Ala
	35					40					45				
Gln	Gln	Ile	Lys	His	Arg	Leu	Asn	Ser	Thr	Gly	Met	Tyr	Val	Ala	Asn
	50				55					60					
Thr	Lys	Pro	Gly	Gly	Phe	Thr	Ile	Glu	Ile	Ser	Asn	Asn	Asn	Ser	Thr
65				70				75						80	
Met	Val	Met	Thr	Gly	Met	Arg	Ile	Gln	Ile	Gly	Thr	Gln	Ala	Ile	Glu
		85				90					95				
Arg	Ala	Pro	Ser	Tyr	Ile	Glu	Ile	Phe	Gly	Arg	Thr	Met	Gln	Leu	Asn
	100					105					110				
Leu	Ser	Arg	Ser	Arg	Trp	Phe	Asp	Phe	Pro	Phe	Thr	Arg	Glu	Glu	Ala
	115					120					125				
Leu	Gln	Ala	Asp	Lys	Lys	Leu	Asn	Leu	Phe	Ile	Gly	Ala	Ser	Val	Asp
	130				135			140							
Pro	Ala	Gly	Val	Thr	Met	Ile	Asp	Ala	Val	Lys	Ile	Tyr	Gly	Lys	Thr

1600



145                      150                      155                      160  
 Lys Glu Gln Phe Gly Trp Pro Asp Glu Pro Pro Glu Glu Phe Pro Ser  
                                  165                      170                      175  
 Ala Ser Val Ser Asn Ile Cys Pro Ser Asn Leu Asn Gln Ser Asn Gly  
                                  180                      185                      190  
 Thr Gly Asp Ser Asp Ser Ala Ala Pro Thr Thr Thr Ser Gly Thr Val  
                                  195                      200                      205  
 Leu Glu Arg Leu Val Val Ser Ser Leu Glu Ala Leu Glu Ser Cys Phe  
                                  210                      215                      220  
 Ala Val Gly Pro Ile Ile Glu Lys Glu Arg Asn Lys Asn Ala Ala Gln  
 225                      230                      235                      240  
 Glu Leu Ala Thr Leu Leu Leu Ser Leu Pro Ala Pro Ala Ser Val Gln  
                                  245                      250                      255  
 Gln Gln Ser Lys Ser Leu Leu Ala Ser Leu His Thr Ser Arg Ser Ala  
                                  260                      265                      270  
 Tyr His Ser His Lys Val Thr Val Leu Ser Gly Lys Gly Asn Cys Ser  
                                  275                      280                      285  
 Ala Asp Arg Glu Ser Asn Lys Leu Ala Leu His Cys Lys Ala Thr Ala  
                                  290                      295                      300  
 Gln Gln Ser Lys Val Glu Gly Gly  
 305                      310

<210> 2151  
 <211> 511  
 <212> DNA  
 <213> Homo sapiens

<400> 2151  
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 60  
 caccaaagcc tgnncgggtg ccggcgcnng cggcagcact ttcactactt catgggctgg  
 120  
 gtgcacacgc gctcctttca gttgaccggg atcgccgac cttgctgggc gctggctcgt  
 180  
 gagctggcgg ccgaggtgcg ggtgctgtgt ttcgatgagc tgttcgtcaa tgacatcggt  
 240  
 gacgcgatca ttctcgggcg cctgtttcag gtgatgttcg acgcaggcgt ggtgggtggtc  
 300  
 tgcacctcca atctgccgcc ggatcagctg tatgccgacg gcttcaaccg cgaccgcttc  
 360  
 ctgccggcga tcaccgcgat caaacagcac atgcaagtgg tcgcggtgaa tggcgcgga  
 420  
 gatcatcgct tgcaccccg cgccatcgag cagcgttact gggctcgctct gccggagcag  
 480  
 ggtagcgcgt tgagccaggt gttcgacgcg t  
 511

<210> 2152  
 <211> 170  
 <212> PRT  
 <213> Homo sapiens

<400> 2152  
 Ala Gly Val Tyr Leu Trp Gly Pro Val Gly Arg Gly Lys Thr Trp Leu

1	5	10	15
Met Asp Gln Phe His Gln Ser Leu Xaa Gly Cys Arg Arg Xaa Arg Gln			
	20	25	30
His Phe His His Phe Met Gly Trp Val His Gln Arg Ser Phe Gln Leu			
	35	40	45
Thr Gly Ile Ala Asp Pro Leu Arg Ala Leu Ala Arg Glu Leu Ala Ala			
	50	55	60
Glu Val Arg Val Leu Cys Phe Asp Glu Leu Phe Val Asn Asp Ile Gly			
65	70	75	80
Asp Ala Ile Ile Leu Gly Arg Leu Phe Gln Val Met Phe Asp Ala Gly			
	85	90	95
Val Val Val Val Cys Thr Ser Asn Leu Pro Pro Asp Gln Leu Tyr Ala			
	100	105	110
Asp Gly Phe Asn Arg Asp Arg Phe Leu Pro Ala Ile Thr Ala Ile Lys			
	115	120	125
Gln His Met Gln Val Val Ala Val Asn Gly Ala Glu Asp His Arg Leu			
	130	135	140
His Pro Gly Ala Ile Glu Gln Arg Tyr Trp Val Ala Leu Pro Glu Gln			
145	150	155	160
Gly Ser Ala Leu Ser Gln Val Phe Asp Ala			
	165	170	

&lt;210&gt; 2153

&lt;211&gt; 528

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2153

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nnaccggtgc caaagagctg gggatcaacc tgccgaacac cgccggtacg cagcagggtg
60
tcagtacgtg cacggcgatt ggcggcgga attgggacca ctccgcgctg atcaagggcc
120
tggagcatat ggccaacttt tcgattcgcg atcaataagc cacaccgctc ccacctttga
180
tggcattcca agtctgaaat tgatccatct ctaataacaa aaatccccgg gagcccgtt
240
atgtcggtcg atccgcaaca cctgcttcgc gagctgtttg ccacagccat cgatgccgcc
300
cacccccggc atgtccttga accttatctg cccgctgacc gcacaggccg tgtgattgtg
360
attggggccc gcaaaaccgc acccgccatg gccctcgtcg tcgagaacgg ctggcaaggc
420
gaagtcaccg gcctggtggt caccgctac ggccacggcg cgccgtgcaa aaaaatcgaa
480
gtggtcgagg ccgctcacc ggtgccggat gccgccggcc tggcggtg
528

```

&lt;210&gt; 2154

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2154

Met Ser Val Asp Pro Gln His Leu Leu Arg Glu Leu Phe Ala Thr Ala

```

      1           5           10           15
Ile Asp Ala Ala His Pro Arg His Val Leu Glu Pro Tyr Leu Pro Ala
      20           25           30
Asp Arg Thr Gly Arg Val Ile Val Ile Gly Pro Gly Lys Thr Ala Pro
      35           40           45
Ala Met Ala Leu Val Val Glu Asn Gly Trp Gln Gly Glu Val Thr Gly
      50           55           60
Leu Val Val Thr Arg Tyr Gly His Gly Ala Pro Cys Lys Lys Ile Glu
65           70           75           80
Val Val Glu Ala Ala His Pro Val Pro Asp Ala Ala Gly Leu Ala Val
      85           90           95

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<210> 2155  
 <211> 297  
 <212> DNA  
 <213> Homo sapiens

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<400> 2155
gtgcaccgcc acggcacacc cgccatgccg cgccgctatt tcgaggccct gctgcaggag
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ttcggccccg actgcgaggt gtcaccgtc accgattcag agggcaaccc cctcagttcg
120
gtgctcagtt tctacttcg tgatgaagt ctgccctact atgcggggcga cgccgtcgcg
180
gcgcgcgaac tggcggccaa tgacttcaaa tactgggagc tgatgcgacg cgctgtgcg
240
cgcgccctca aggtgtttga ctacggccgc agcaagcagg gcacgggctc ctacgcn
297

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<210> 2156  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

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<400> 2156
Met Pro Arg Tyr Phe Glu Ala Leu Leu Gln Glu Phe Gly Pro Asp
 1           5           10           15
Cys Glu Val Leu Thr Val Thr Asp Ser Glu Gly Asn Pro Leu Ser Ser
      20           25           30
Val Leu Ser Phe Tyr Phe Arg Asp Glu Val Leu Pro Tyr Tyr Ala Gly
      35           40           45
Asp Ala Val Ala Ala Arg Glu Leu Ala Ala Asn Asp Phe Lys Tyr Trp
      50           55           60
Glu Leu Met Arg Arg Ala Cys Ala Arg Gly Leu Lys Val Phe Asp Tyr
65           70           75           80
Gly Arg Ser Lys Gln Gly Thr Gly Ser Tyr Ala
      85           90

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<210> 2157  
 <211> 711  
 <212> DNA  
 <213> Homo sapiens

<400> 2157

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 120  
 ttgctggcat cctctctcat cccgggtaat gagaatgccg tctatcgagt gattaatggc  
 180  
 ctgacgaagc ttggcgccgc cgtggtacat aagggcaacg ctttgggtcca cgtttcgggc  
 240  
 catgcccgag ccggagagct gctgtacgcg tataacatcg tgcggccacg cgctgtgatg  
 300  
 ccgattcatg gtgaggtgcg tcatcttgtc gctaataccg atctggccaa agcaaccggt  
 360  
 gtcgatgaga acaacgtggt gcttgtcgag gacggcgggg ttattgacct tgttgacgga  
 420  
 gtaccgcgag ttgttggtcaa ggtcgatgcc tcgtacatcc ttgttgacgg atctgggggtg  
 480  
 ggggagctta ccgaggacac gctcactgat cgccgtatcc tcggtgagga gggattcttg  
 540  
 tcagtcgtca ccgtgggtcga caccgctcg gcgtcagtgg tgtctcgccc ggcgatccag  
 600  
 gcgcgtgggt ttgccgaggg cgactcggtc ttcgaggaga tcaccgacca gatcgtcacc  
 660  
 gagctagaga aggcgatggc cgggtggtatg gacgataccc accggttgca a  
 711

&lt;210&gt; 2158

&lt;211&gt; 237

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2158

Xaa	Arg	Asp	Asn	Glu	Val	Val	Ile	Ile	Ser	Thr	Gly	Ser	Gln	Gly	Glu
1				5					10					15	
Pro	Leu	Ser	Ala	Leu	Ala	Arg	Ile	Ala	Asn	Arg	Glu	His	Arg	Asp	Ile
			20					25					30		
Glu	Val	Gly	Glu	Gly	Asp	Thr	Val	Leu	Leu	Ala	Ser	Ser	Leu	Ile	Pro
		35					40				45				
Gly	Asn	Glu	Asn	Ala	Val	Tyr	Arg	Val	Ile	Asn	Gly	Leu	Thr	Lys	Leu
	50					55				60					
Gly	Ala	Ala	Val	Val	His	Lys	Gly	Asn	Ala	Leu	Val	His	Val	Ser	Gly
65					70				75					80	
His	Ala	Ala	Ala	Gly	Glu	Leu	Leu	Tyr	Ala	Tyr	Asn	Ile	Val	Arg	Pro
			85					90					95		
Arg	Ala	Val	Met	Pro	Ile	His	Gly	Glu	Val	Arg	His	Leu	Val	Ala	Asn
			100					105					110		
Ala	Asp	Leu	Ala	Lys	Ala	Thr	Gly	Val	Asp	Glu	Asn	Asn	Val	Val	Leu
		115					120					125			
Val	Glu	Asp	Gly	Gly	Val	Ile	Asp	Leu	Val	Asp	Gly	Val	Pro	Arg	Val
	130					135				140					
Val	Gly	Lys	Val	Asp	Ala	Ser	Tyr	Ile	Leu	Val	Asp	Gly	Ser	Gly	Val
145					150				155					160	
Gly	Glu	Leu	Thr	Glu	Asp	Thr	Leu	Thr	Asp	Arg	Arg	Ile	Leu	Gly	Glu
			165				170						175		
Glu	Gly	Phe	Leu	Ser	Val	Val	Thr	Val	Val	Asp	Thr	Arg	Ser	Ala	Ser

180 185 190  
Val Val Ser Arg Pro Ala Ile Gln Ala Arg Gly Phe Ala Glu Gly Asp  
195 200 205  
Ser Val Phe Ala Glu Ile Thr Asp Gln Ile Val Thr Glu Leu Glu Lys  
210 215 220  
Ala Met Ala Gly Gly Met Asp Asp Thr His Arg Leu Gln  
225 230 235

<210> 2159  
<211> 322  
<212> DNA  
<213> Homo sapiens

<400> 2159  
tcgcgagcac actccagcct ctggagagac gacaacgcgt gaaggggcac cagcttgagg  
60  
ggcagcagct ccaggggagg cctgggaggg ctttgtgcag aagaagcctg tttccttcta  
120  
cctgttttga aaagttgtct ctgcagatgg tgggtgagag ttcgctgcca gggccactgt  
180  
cttccctgcc ctgcggacac ttcttcccca ccttcctaaa gctgtgggag acctggagcc  
240  
gtggagcatc aatggtcttt tgactcagga atcttaaaaa atcacaccct ggggctacca  
300  
tgggggcctt ctggttctcc tt  
322

<210> 2160  
<211> 100  
<212> PRT  
<213> Homo sapiens

<400> 2160  
Met Val Ala Pro Gly Cys Asp Phe Leu Arg Phe Leu Ser Gln Arg Ala  
1 5 10 15  
Ile Asp Ala Pro Arg Leu Gln Val Ser His Ser Phe Arg Lys Val Gly  
20 25 30  
Lys Lys Cys Pro Gln Gly Arg Glu Asp Ser Gly Pro Gly Ser Glu Leu  
35 40 45  
Ser Pro Thr Ile Cys Arg Asp Asn Phe Ser Lys Gln Val Glu Gly Asn  
50 55 60  
Arg Leu Leu Leu His Lys Ala Leu Pro Gly Arg Pro Trp Ser Cys Cys  
65 70 75 80  
Pro Ala Ser Trp Cys Pro Phe Thr Arg Cys Arg Leu Ser Arg Gly Trp  
85 90 95  
Ser Val Leu Ala  
100

<210> 2161  
<211> 1070  
<212> DNA  
<213> Homo sapiens

<400> 2161

tcttagggga aggggaaggct tatctgaaga gtagacctct ggttttgaat gagggagaca  
 60  
 gtggggatat gaggggagga aacctcaaaa agaatatgta tccatcacta tgaaagggtta  
 120  
 ggctatacag gggaagcctc caaagggaaa tctggaaaaa tgttctgaga gggacattaa  
 180  
 ggatgtactc agaaattaag aaaacatatt aggacttgcc aaaagtgaga gaagcaactg  
 240  
 aggagactta tatgcaaaaa tcgcaaagaa ggagagaaca aaagatggag gttggatgct  
 300  
 aaatagggaa agagaacgcg tgaatgaggt agggggcaga acatgcagtg cagaaaaaca  
 360  
 acagatatgg aagggcatta aagagggcta aatgggaata ttaggaaatg agagttggga  
 420  
 atttgtcaga gttgtgtatt aacaaggaga gggtaaggta agaaggtggc aaagtaagag  
 480  
 ccagggcata aggttttgct gtccaggaag ctttgttga aaaatgttag aagtaatggg  
 540  
 tttggtcagt atggtgagag gtgagagagg ctaaagggga tgggcataaa gggcaggcca  
 600  
 gtggcaagaa tcctatgaaa gtgtaggcag atctgagagc acagacaaat acagtggaga  
 660  
 atgtggcaca gggcagaggg cagtgggctg agcagcgagt gcccattggg aggggagtat  
 720  
 ccagaagaac ccattgagtc cctaagaatg acacacaggt gacagctgaa agaaggaggg  
 780  
 acacagaaga tatagcagca tgattctctg gggcaaaatg aggaagaaag gaatggaaga  
 840  
 agaaagtga gggttcctgc tgatgtgagg ggatgactgg aggaaaggca ggtattgact  
 900  
 ggggggtaaa ggaaccattc ttggatcaag gttatgatgg aataagaagg aagagagagc  
 960  
 tggctagctg agtaaaggac catcgataaa aacagacaaa agttaagact agatggagtg  
 1020  
 gcaactaggc agatcagatg tatttttaaa aggggaaact gctaagatct  
 1070

&lt;210&gt; 2162

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2162

Met Val Leu Tyr Ser Ala Ser Gln Leu Ser Leu Pro Ser Tyr Ser Ile  
 1 5 10 15  
 Ile Thr Leu Ile Gln Glu Trp Phe Leu Tyr Pro Pro Val Asn Thr Cys  
 20 25 30  
 Leu Ser Ser Ser His Pro Leu Thr Ser Ala Gly Thr Leu His Phe Leu  
 35 40 45  
 Leu Pro Phe Leu Ser Ser Ser Phe Cys Pro Arg Glu Ser Cys Cys Tyr  
 50 55 60  
 Ile Phe Cys Val Pro Pro Ser Phe Ser Cys His Leu Cys Val Ile Leu  
 65 70 75 80  
 Arg Asp Ser Met Gly Ser Ser Gly Tyr Ser Pro Pro His Gly His Ser

85 90 95  
 Leu Leu Ser Pro Leu Pro Ser Ala Leu Cys His Ile Leu His Cys Ile  
 100 105 110  
 Cys Leu Cys Ser Gln Ile Cys Leu His Phe His Arg Ile Leu Ala Thr  
 115 120 125  
 Gly Leu Pro Phe Met Pro Ile Pro Phe Ser Leu Ser His Leu Ser Pro  
 130 135 140  
 Tyr  
 145

<210> 2163  
 <211> 657  
 <212> DNA  
 <213> Homo sapiens

<400> 2163  
 tatttaaatc ttataaaaa aggtaggagg atcaggactt cgacccctt aaaacgcggc  
 60  
 ggcctccctc caatccacct ccacttccta caccacccc getctcccc ccccccttt  
 120  
 tggttccggg ttggaagggt ggggtgaaatg ggaaccgaat accaatttca cccgggaacc  
 180  
 agtaatgcc atgataaccg ccaagttggg accgaagttg ggatccataa gtacgggcgg  
 240  
 ccagtggggt ggaattgggt taagccccct ccagccttt ctccgaccgc gtgctccgtc  
 300  
 agacatgcca agaggctctc tctccaggag agccacctgt gaaaccacc cggcatgtct  
 360  
 ctcccaccac tgtgcacaga cgagtgcctg ggctccagag agggagggag ctgaaggcct  
 420  
 cagacaggag tccgtccgt ccagtcccat catccaaga aacatccggc ccgactccct  
 480  
 gcagctccat ggctcaaca ggtgcggatg cctgctggac ctggctgctt tccatccaac  
 540  
 tttgatccct tccccagag gaagagtgt acctagggac aagtgtggtg cgcacaggca  
 600  
 tgcagcctgg tctcttgctc aggcggcttg cgcagattcc tagaggaatc tgcagcg  
 657

<210> 2164  
 <211> 152  
 <212> PRT  
 <213> Homo sapiens

<400> 2164  
 Met Pro Met Ile Thr Ala Lys Leu Gly Pro Lys Leu Gly Ser Ile Ser  
 1 5 10 15  
 Thr Gly Gly Gln Trp Gly Gly Ile Gly Leu Ser Pro Leu Pro Ala Phe  
 20 25 30  
 Leu Arg Pro Arg Ala Pro Ser Asp Met Pro Arg Gly Ser Leu Ser Arg  
 35 40 45  
 Arg Ala Thr Cys Glu Thr His Pro Ala Cys Ser Ser His His Cys Ala  
 50 55 60  
 Gln Thr Ser Ala Trp Ala Pro Glu Arg Glu Gly Ala Glu Gly Leu Arg

65                                70                                75                                80  
Gln Glu Ser Val Pro Ser Ser Pro Ile Ile Pro Arg Asn Ile Arg Pro  
                              85                                90                                95  
Asp Ser Leu Gln Leu His Gly Ser Thr Arg Cys Gly Cys Leu Leu Asp  
                              100                                105                                110  
Leu Ala Ala Phe His Pro Thr Leu Ile Pro Ser Pro Arg Gly Arg Val  
                              115                                120                                125  
Leu Pro Arg Asp Lys Cys Gly Ala His Arg His Ala Ala Trp Ser Leu  
                              130                                135                                140  
Ala Gln Ala Ala Cys Ala Asp Ser  
145                                150

<210> 2165  
<211> 962  
<212> DNA  
<213> Homo sapiens

<400> 2165  
nctttctcat cgacagcgac gcacaaccgg cgacatcacc ggtgacgggt caaggtggca  
60  
gcccgagggc ccgccgtgaa cttatttgtt cgtcttatgg aagaaaagtc actcggaagt  
120  
accgtaaadc accccagcgc ctcatcccc gaatctgttc gccatctgct gtcgcccctg  
180  
cgcttaaggc atcacccac tagactgacc gaagtctcgc cgaggagggc tagggaggct  
240  
taggtggcca ggaatgacat cgggacgacg tctacgcgtc gaataggcag cggacgtacg  
300  
tcgagtaccg gccgtacggt ggtgtcttct gaccgcacac gcagagctat cgctaaaaga  
360  
ttgatggccc gcacctcagc tatgacgacg gccactctag aggaaatggg tcgtcgacac  
420  
tcctgggttc gtgatctgtc agccgaagaa agatcgtgga tctcgatcgt ggctcgctca  
480  
ggtattgacg gcttcgtcca gtggtttgct gacgatgacg ccgagcccta cccccacc  
540  
gacgtcttcg acgtggcgcc ccggtccatg acccgcaaga tctccttgca ccagacagtc  
600  
gagctcgtcc gcaccacgat tgacgtcgtt gaggcacaaa ttgagaccga aatgccacgc  
660  
ggtgatcgcc aagtgtgctg cactgccatc gttcactact cccgcgaggt ggccttcgcc  
720  
gccgcccagg ttacgcgcg agccgccgaa cgtcgcggta cctgggatga acgtctggaa  
780  
tccctcgtcg ttgatgccgt cgtgcgagcc gacgccgatg aacagctcat ctcgcgagct  
840  
tctactctcg gctggcgccc gggcatcaac ctctgcgtcg ttgtcgggcg ggccccgacg  
900  
accgagcatg aactccacgt gctgcgacgt gatggagaac gcatgcagat gacggtgcta  
960  
gc  
962

<210> 2166



<211> 239  
 <212> PRT  
 <213> Homo sapiens

<400> 2166  
 Val Ala Arg Asn Asp Ile Gly Thr Thr Ser Thr Arg Arg Ile Gly Ser  
 1 5 10 15  
 Gly Arg Thr Ser Ser Thr Gly Arg Thr Val Val Ser Ser Asp Arg Thr  
 20 25 30  
 Arg Arg Ala Ile Ala Lys Arg Leu Met Ala Arg Thr Ser Ala Met Thr  
 35 40 45  
 Thr Ala Thr Leu Glu Glu Met Gly Arg Arg His Ser Trp Phe Arg Asp  
 50 55 60  
 Leu Ser Ala Glu Glu Arg Ser Trp Ile Ser Ile Val Ala Arg Ser Gly  
 65 70 75 80  
 Ile Asp Gly Phe Val Gln Trp Phe Ala Asp Asp Asp Ala Glu Pro Tyr  
 85 90 95  
 Ser Pro Thr Asp Val Phe Asp Val Ala Pro Arg Ser Met Thr Arg Lys  
 100 105 110  
 Ile Ser Leu His Gln Thr Val Glu Leu Val Arg Thr Thr Ile Asp Val  
 115 120 125  
 Val Glu Ala Gln Ile Glu Thr Glu Met Pro Arg Gly Asp Arg Gln Val  
 130 135 140  
 Leu Arg Thr Ala Ile Val His Tyr Ser Arg Glu Val Ala Phe Ala Ala  
 145 150 155 160  
 Ala Glu Val Tyr Ala Arg Ala Ala Glu Arg Arg Gly Thr Trp Asp Glu  
 165 170 175  
 Arg Leu Glu Ser Leu Val Val Asp Ala Val Val Arg Ala Asp Ala Asp  
 180 185 190  
 Glu Gln Leu Ile Ser Arg Ala Ser Thr Leu Gly Trp Arg Pro Gly Ile  
 195 200 205  
 Asn Leu Cys Val Val Val Gly Arg Ala Pro Thr Thr Glu His Glu Leu  
 210 215 220  
 His Val Leu Arg Arg Asp Gly Glu Arg Met Gln Met Thr Val Leu  
 225 230 235

<210> 2167  
 <211> 325  
 <212> DNA  
 <213> Homo sapiens

<400> 2167  
 accggtgcag tttgtgaggg gttggtgacg cccgatcggg aggttcacgc cgtcacggcg  
 60  
 catccacatt atccccgactg gaagatctcg ccagggttacg gacagtgggtc gcgtagcgaa  
 120  
 cagatcgaca gtgtgactgt gacgcgagtc agacacttcg tcccgcggcg tcccacggcg  
 180  
 attcttcgag cgggtgtctga ggtgacgttc ggggttcgctc tctgcgccgt ccgttggcga  
 240  
 agcaccgcgg cgattgtggc tgtgtcgccg gccttgctct cgacgcggtc gcgcgggtcg  
 300  
 tgcgctgac tcccacagca taccc  
 325

<210> 2168  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 2168  
 Thr Gly Ala Val Cys Glu Gly Leu Val Thr Pro Asp Arg Glu Val His  
 1 5 10 15  
 Ala Val Thr Ala His Pro His Tyr Pro Asp Trp Lys Ile Ser Pro Gly  
 20 25 30  
 Tyr Gly Gln Trp Ser Arg Ser Glu Gln Ile Asp Ser Val Thr Val Thr  
 35 40 45  
 Arg Val Arg His Phe Val Pro Arg Arg Pro Thr Ala Ile Leu Arg Ala  
 50 55 60  
 Val Ser Glu Val Thr Phe Gly Leu Arg Leu Cys Ala Val Arg Trp Arg  
 65 70 75 80  
 Ser Thr Ala Ala Ile Val Ala Val Ser Pro Ala Leu Leu Ser Thr Arg  
 85 90 95  
 Ser Arg Gly Ser Cys Ala Asp Leu Pro Gln His Thr  
 100 105

<210> 2169  
 <211> 309  
 <212> DNA  
 <213> Homo sapiens

<400> 2169  
 gaggacgcct acgtgctcat caccagggc aagatctcgg cgatcgccga cgtcctgccg  
 60  
 atcctggaga aggtcgtcaa ggccggcaag ccgctgctcg tcatcgccga ggacatcgac  
 120  
 ggggaggccc tgtccaccct cgtcgtcaat aagatccgcg gtaccttcag ctcggtggca  
 180  
 gtcaaggcgc ccggcttcgg tgaccgccgc aaggcaatgc tgcaggacat cgccaccctc  
 240  
 accggtggtc aggtcgtcgc tcccgagggt gggctcaagc tcgaccaggt gggcctcgag  
 300  
 gttcagggc  
 309

<210> 2170  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 2170  
 Glu Asp Ala Tyr Val Leu Ile Thr Gln Gly Lys Ile Ser Ala Ile Ala  
 1 5 10 15  
 Asp Val Leu Pro Ile Leu Glu Lys Val Val Lys Ala Gly Lys Pro Leu  
 20 25 30  
 Leu Val Ile Ala Glu Asp Ile Asp Gly Glu Ala Leu Ser Thr Leu Val  
 35 40 45  
 Val Asn Lys Ile Arg Gly Thr Phe Ser Ser Val Ala Val Lys Ala Pro

50                      55                      60  
 Gly Phe Gly Asp Arg Arg Lys Ala Met Leu Gln Asp Ile Ala Thr Leu  
 65                      70                      75                      80  
 Thr Gly Gly Gln Val Val Ala Pro Glu Val Gly Leu Lys Leu Asp Gln  
                     85                      90                      95  
 Val Gly Leu Glu Val Gln Gly  
                     100

<210> 2171  
 <211> 518  
 <212> DNA  
 <213> Homo sapiens

<400> 2171  
 cgcgtaatgt gtattaaggt ccttggtggc tcgcacgcc gttatgcagc aatcggtgat  
 60  
 atcatcaaag ttccagtga ggaagcaatt cctcgcgga aaattaaaaa aggtaatggt  
 120  
 cattcagctg tggtagtgcg taccagaaaa ggtgtacgtc gtcccgatgg ttctgttatt  
 180  
 cgttttgatc gcaacgcagc ggttatcttg aatgcaaaca accagccagt cggtacacgt  
 240  
 atctttggcc ctgtaaccgg tgagcttcga aatgaaaatt tcatgaagat tgtttcactg  
 300  
 gcgcagaag tactgtaagg aaccgaaaat ggcagcaaaa ataaacgtg acgatgaagt  
 360  
 aattgttatt gccggtaaag ataaaggtaa aactgggaaa gtttctcaag ttttaactaa  
 420  
 cggtaaagta attattgaag gtgtaaatgt tcaaaagaaa caccaaaaac caaacctca  
 480  
 agcgggcgtg gaaggcggaa tcattgaaca gaatgcat  
 518

<210> 2172  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 2172  
 Arg Val Met Cys Ile Lys Val Leu Gly Gly Ser His Arg Arg Tyr Ala  
 1                      5                      10                      15  
 Ala Ile Gly Asp Ile Ile Lys Val Ser Val Lys Glu Ala Ile Pro Arg  
                     20                      25                      30  
 Gly Lys Ile Lys Lys Gly Asn Val His Ser Ala Val Val Val Arg Thr  
                     35                      40                      45  
 Arg Lys Gly Val Arg Arg Pro Asp Gly Ser Val Ile Arg Phe Asp Arg  
                     50                      55                      60  
 Asn Ala Ala Val Ile Leu Asn Ala Asn Asn Gln Pro Val Gly Thr Arg  
 65                      70                      75                      80  
 Ile Phe Gly Pro Val Thr Arg Glu Leu Arg Asn Glu Asn Phe Met Lys  
                     85                      90                      95  
 Ile Val Ser Leu Ala Pro Glu Val Leu  
                     100                      105

<210> 2173  
<211> 475  
<212> DNA  
<213> Homo sapiens

<400> 2173  
nntggggaag aaatgccggt gcatgcactt tgtgcagcat taggtgcagg ggtgatgcag  
60  
cgggcgcgtg ccttttgctg cgggggttctg agcattcatc tggatgcacg attttcgcat  
120  
gcatttcttg tatcctcgtc atgcgtttct ccccatgcac acacattatc gcctttgcac  
180  
ccgcagggac gcatggaata cctcgtgaaa tgggaaggat ggtcgcagaa gtacagcaca  
240  
tgggaaccgg aggaaaacat cctggatgct cgcttgctcg cagcctttga ggaaagggaa  
300  
agagagatgg agctctatgg ccccaaaaag cgtggacca agcccaaac cttcctctc  
360  
aaagcgcagg ccaaggcaaa ggccaaaact tacgagtttc gaagtgactc agccaggggc  
420  
atccgatcc cctaccctgg ccgctcgccc caggacctgg cctccacttc ccggg  
475

<210> 2174  
<211> 158  
<212> PRT  
<213> Homo sapiens

<400> 2174  
Xaa Gly Glu Glu Met Pro Val His Ala Leu Cys Ala Ala Leu Gly Ala  
1 5 10 15  
Gly Val Met Gln Arg Ala Arg Ala Phe Cys Gly Gly Val Ser Ser Ile  
20 25 30  
His Leu Val His Ala Phe Ser His Ala Phe Leu Val Ser Ser Ser Cys  
35 40 45  
Val Ser Pro His Ala His Thr Leu Ser Pro Leu His Pro Gln Gly Arg  
50 55 60  
Met Glu Tyr Leu Val Lys Trp Lys Gly Trp Ser Gln Lys Tyr Ser Thr  
65 70 75 80  
Trp Glu Pro Glu Glu Asn Ile Leu Asp Ala Arg Leu Leu Ala Ala Phe  
85 90 95  
Glu Glu Arg Glu Arg Glu Met Glu Leu Tyr Gly Pro Lys Lys Arg Gly  
100 105 110  
Pro Lys Pro Lys Thr Phe Leu Leu Lys Ala Gln Ala Lys Ala Lys Ala  
115 120 125  
Lys Thr Tyr Glu Phe Arg Ser Asp Ser Ala Arg Gly Ile Arg Ile Pro  
130 135 140  
Tyr Pro Gly Arg Ser Pro Gln Asp Leu Ala Ser Thr Ser Arg  
145 150 155

<210> 2175  
<211> 462  
<212> DNA  
<213> Homo sapiens

<400> 2175  
cgcgacaccc tctttggtgg ggccttcct tctccgaatt cggaaccct ccagactctg  
60  
gcccaggagg ttgtcgagcg tggagccgat atcggcattg ccactgatgg tgacgcagac  
120  
cgctcggta tcattgatga ccaggggcat ttcttgcatc ccaaccagat cctcgtattg  
180  
ctgtacacct accttctgga ggacaagggg tggcaggtgc cctgcgtgcg taacctcgcg  
240  
acgaccaccc tgcttgaccg tgtcgccgag gccacggggc agacctgtta cgaggtaccg  
300  
gtcggattta agtgggtgtc gtccaagatg gccgagacca acgccgtcat cggtggtgag  
360  
tcctccggtg gtttgaccgt ccaggggcat attgcaggca aggatggtgt ctatgctggc  
420  
accctgctgg tggaaatgat cgccaagcgg ggtaagaagc tt  
462

<210> 2176  
<211> 154  
<212> PRT  
<213> Homo sapiens

<400> 2176  
Arg Asp Thr Leu Phe Gly Gly Arg Leu Pro Ser Pro Asn Ser Arg Thr  
1 5 10 15  
Leu Gln Thr Leu Ala Gln Glu Val Val Glu Arg Gly Ala Asp Ile Gly  
20 25 30  
Ile Ala Thr Asp Gly Asp Ala Asp Arg Leu Gly Ile Ile Asp Asp Gln  
35 40 45  
Gly His Phe Leu His Pro Asn Gln Ile Leu Val Leu Leu Tyr Thr Tyr  
50 55 60  
Leu Leu Glu Asp Lys Gly Trp Gln Val Pro Cys Val Arg Asn Leu Ala  
65 70 75 80  
Thr Thr His Leu Leu Asp Arg Val Ala Glu Ala His Gly Gln Thr Cys  
85 90 95  
Tyr Glu Val Pro Val Gly Phe Lys Trp Val Ser Ser Lys Met Ala Glu  
100 105 110  
Thr Asn Ala Val Ile Gly Gly Glu Ser Ser Gly Gly Leu Thr Val Gln  
115 120 125  
Gly His Ile Ala Gly Lys Asp Gly Val Tyr Ala Gly Thr Leu Leu Val  
130 135 140  
Glu Met Ile Ala Lys Arg Gly Lys Lys Leu  
145 150

<210> 2177  
<211> 478  
<212> DNA  
<213> Homo sapiens

<400> 2177  
ctcgagaatc atgacggcga cgacgtgact atctccaccc gtgtgcctcg tgacggcggg  
60

accttggaact cgattgtcgg cgtgctggcc ggggcacccct ggtatcagcg ggagatccac  
120  
gacttttttg gtgtgaggtt tgcggccct ggggcagatg atcgtgccct ccttgccac  
180  
gatgcaccga aaccgcccct gcgcaaggaa gctgtgttgg cgcagcgagc tgacaccgtg  
240  
tggccgggtg cggctgacca ggctggctcg aagtccgcga gtcgacgtct gccggtcggc  
300  
gttctgacc ctgagacgtg gcggcgtatc aaagacggcg aggatattcc ggatgccgag  
360  
gtcatcgagg ccatgtctgg ccggcgcccg cgatcagctg cccgtcgaat ggcaagcacg  
420  
gcgtcaggca ggcaggcatg agacattcga ctatcaacct tgacgtcgac gcgtgcac  
478

&lt;210&gt; 2178

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2178

Leu	Glu	Asn	His	Asp	Gly	Asp	Asp	Val	Thr	Ile	Ser	Thr	Arg	Val	Pro
1				5				10						15	
Arg	Asp	Gly	Gly	Thr	Leu	Asp	Ser	Ile	Val	Gly	Val	Leu	Ala	Gly	Ala
			20					25					30		
Ser	Trp	Tyr	Gln	Arg	Glu	Ile	His	Asp	Phe	Phe	Gly	Val	Arg	Phe	Val
		35					40					45			
Gly	Pro	Gly	Ala	Asp	Asp	Arg	Ala	Leu	Leu	Val	His	Asp	Ala	Pro	Lys
	50					55					60				
Pro	Pro	Leu	Arg	Lys	Glu	Ala	Val	Leu	Ala	Gln	Arg	Ala	Asp	Thr	Val
65					70					75				80	
Trp	Pro	Gly	Ala	Ala	Asp	Gln	Ala	Gly	Ser	Lys	Ser	Ala	Ser	Arg	Arg
			85					90						95	
Leu	Pro	Val	Gly	Val	Pro	Asp	Pro	Glu	Thr	Trp	Arg	Arg	Ile	Lys	Asp
		100						105					110		
Gly	Glu	Asp	Ile	Pro	Asp	Ala	Glu	Val	Ile	Ala	Ala	Met	Ser	Gly	Arg
	115						120					125			
Arg	Pro	Arg	Ser	Ala	Ala	Arg	Arg	Met	Ala	Ser	Thr	Ala	Ser	Gly	Arg
	130					135						140			
Gln	Ala														
145															

&lt;210&gt; 2179

&lt;211&gt; 296

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2179

gtgcacttcc gagtggacgt cgagcgctgc attaacgggg ccggcgcggt gggcgcacac  
60  
aagacgtcga tgctgcagga tctggacngc gaccgcgcga tggagatcga cccgtcgtc  
120  
tccgtcgttc aggagatggg acgcctggcc aacgtgccga cgcccacgct cgatgtcgtg  
180

ctcccactga tcaagcaacg tgaattcatg acgaagccgg atgccgtggc ggccgcgcag  
 240  
 gaacgtctgg ctaaagcggc ataaaccagc cgccgaaacc agcggcataa cgcggg  
 296

<210> 2180  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

<400> 2180  
 Val His Phe Arg Val Asp Val Glu Arg Arg Ile Asn Gly Ala Gly Ala  
 1 5 10 15  
 Val Gly Ala His Lys Thr Ser Met Leu Gln Asp Leu Asp Xaa Asp Arg  
 20 25 30  
 Ala Met Glu Ile Asp Pro Leu Val Ser Val Val Gln Glu Met Gly Arg  
 35 40 45  
 Leu Ala Asn Val Pro Thr Pro Thr Leu Asp Val Val Leu Pro Leu Ile  
 50 55 60  
 Lys Gln Arg Glu Phe Met Thr Lys Pro Asp Ala Val Ala Ala Ala Gln  
 65 70 75 80  
 Glu Arg Leu Ala Lys Ala Ala  
 85

<210> 2181  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

<400> 2181  
 ngcgcgccgg gatggatcat agtctggctc gatgcatcac gtgcgcgcac gcgcgcgctg  
 60  
 tcgattcccg acggcatgat cgcggcactc gaccgtaccg gcaaggcgca aacgcacctc  
 120  
 acgctggcat cgccggaagc ggggtgtcgtc agcgaactga acgtgcgcga cgggtgcgatg  
 180  
 gtcgcgccgg ggcagacgct cgcgaagatt tcgggcctct cgaagctctg gctgatcgtc  
 240  
 gagattccgg aagcgcctgc gctcgatgcy cgtccgggca tgaccgtcga cgcgacgttc  
 300  
 tcgggcgatc cgacgcagca tttcaccggg cgtatccgcg agatcctgcc gggcatcacc  
 360  
 accagtagcc gcacgcttca ggcgcgc  
 387

<210> 2182  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 2182  
 Xaa Ala Pro Gly Trp Ile Ile Val Trp Leu Asp Ala Ser Arg Ala Arg  
 1 5 10 15  
 Met Arg Ala Leu Ser Ile Pro Asp Gly Met Ile Ala Ala Leu Asp Arg

20 25 30  
 Thr Gly Lys Ala Gln Thr His Leu Thr Leu Ala Ser Pro Glu Ala Gly  
 35 40 45  
 Val Val Ser Glu Leu Asn Val Arg Asp Gly Ala Met Val Ala Pro Gly  
 50 55 60  
 Gln Thr Leu Ala Lys Ile Ser Gly Leu Ser Lys Leu Trp Leu Ile Val  
 65 70 75 80  
 Glu Ile Pro Glu Ala Leu Ala Leu Asp Ala Arg Pro Gly Met Thr Val  
 85 90 95  
 Asp Ala Thr Phe Ser Gly Asp Pro Thr Gln His Phe Thr Gly Arg Ile  
 100 105 110  
 Arg Glu Ile Leu Pro Gly Ile Thr Thr Ser Ser Arg Thr Leu Gln Ala  
 115 120 125  
 Arg

<210> 2183  
 <211> 310  
 <212> DNA  
 <213> Homo sapiens

<400> 2183  
 aagcttgaaa aacaaatttg tgcacagtct gataacccaa aaatgactga tggattggct  
 60  
 ctgcattttc caagcagggga ggggtcgggc atggagaatg aaacattctg agaaaagact  
 120  
 taaatgtgga aacttttgggt tcaagaggggt attctaggag atacaagaaa tatctcctgg  
 180  
 gggcatccaa agggaataac actgtaatct tgagtgatgt atggttccat tgcccagagga  
 240  
 atagggatga aaaccataaa ctcttttggg tgggtattaa cttatcantc aaagttacca  
 300  
 tanataatgg  
 310

<210> 2184  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 2184  
 Met Val Thr Leu Xaa Asp Lys Leu Ile Pro Thr Gln Arg Ser Leu Trp  
 1 5 10 15  
 Phe Ser Ser Leu Phe Leu Gly Gln Trp Asn His Thr Ser Leu Lys Ile  
 20 25 30  
 Thr Val Leu Phe Pro Leu Asp Ala Pro Arg Arg Tyr Phe Leu Tyr Leu  
 35 40 45  
 Leu Glu Tyr Pro Leu Glu Pro Lys Val Ser Thr Phe Lys Ser Phe Leu  
 50 55 60  
 Arg Met Phe His Ser Pro Cys Pro Thr Pro Pro Cys Leu Glu Asn Ala  
 65 70 75 80  
 Glu Pro Ile His Gln Ser Phe Leu Gly Tyr Gln Thr Val His Lys Phe  
 85 90 95  
 Val Phe Gln Ala



100

<210> 2185  
<211> 723  
<212> DNA  
<213> Homo sapiens

<400> 2185  
ngaatatcca tgcagcagct cgtcgacaat tttgacgggtg ccatccctga cgatcttgac  
60  
tctcttgtga ccctgcccgg agtcgggtcgt aagaccgcca atgttggtttt aggtaatgcc  
120  
ttcggcacc ccggaatcac cccggacacc cacgtcatgc gggatatctcg acgtctgggc  
180  
tggaccgatg cgactacccc cgccaagggtg gaaaccgacc tggctgagct ttttgacccg  
240  
tctgaatggg tgatgttgtg tcaccgcctc atctggcacg ggccggcgcg ctgtcactcg  
300  
cgccgtcctg cctgccccgt atgcccgggt gccgagtggg gcccgctctt cggggaaggc  
360  
ccaacggatc ccgaggaggc cgccacgtta gtccgggagc cgcgtcgatg agggggatga  
420  
acgttttcgg cgcggtgatg gccgccttga tgtttgctgg ctgcggggga gatgcgggca  
480  
tagctcatca gcgtgaaaat gccggaatac cgggggtgctc gcatttgccg tcggggccga  
540  
ttgcgaaaag ttccgggccc gccacagagg gccggcccat gcccgatcac ggcttgcaat  
600  
gccttggtga ggggcccagc atctccatgt ctccggcgac atcgaggggc gtgaccgtcg  
660  
tgacgatctg ggcgctcgtg tgcgaccat gtcgtagtga ggctccgctc attgcgaacg  
720  
cgt  
723

<210> 2186  
<211> 136  
<212> PRT  
<213> Homo sapiens

<400> 2186  
Xaa Ile Ser Met Gln Gln Leu Val Asp Asn Phe Asp Gly Ala Ile Pro  
1 5 10 15  
Asp Asp Leu Asp Ser Leu Val Thr Leu Pro Gly Val Gly Arg Lys Thr  
20 25 30  
Ala Asn Val Val Leu Gly Asn Ala Phe Gly Ile Pro Gly Ile Thr Pro  
35 40 45  
Asp Thr His Val Met Arg Val Ser Arg Arg Leu Gly Trp Thr Asp Ala  
50 55 60  
Thr Thr Pro Ala Lys Val Glu Thr Asp Leu Ala Glu Leu Phe Asp Pro  
65 70 75 80  
Ser Glu Trp Val Met Leu Cys His Arg Leu Ile Trp His Gly Arg Arg  
85 90 95  
Arg Cys His Ser Arg Arg Pro Ala Cys Gly Val Cys Pro Val Ala Glu

1617

100 105 110  
Trp Cys Pro Ser Phe Gly Glu Gly Pro Thr Asp Pro Glu Glu Ala Ala  
115 120 125  
Thr Leu Val Arg Glu Pro Arg Arg  
130 135

<210> 2187  
<211> 342  
<212> DNA  
<213> Homo sapiens

<400> 2187  
nnacgcgtga aggatgcgcc ccggtcgacc ggccatccgt cttgcctcgc aggcattccag  
60  
cccgccatat gctgcaaccg caacaccgct ttgccgtcgc atggcatctc cactccggat  
120  
cgcattgatc cactgagggct atcggcgcca aagaagttgc cggggcaaaa tcccggcgag  
180  
gaaagcccga tggagtggaa gacgctgctc aacgacaccc gcttcggagg ggtcgccagc  
240  
ctcgatggga cgcgcggacg gtcggagttc cagaaggacc acgaccgat catcttctcc  
300  
gaagccttcc gcaagctggg ccgcaagacc caggtgcacc cg  
342

<210> 2188  
<211> 51  
<212> PRT  
<213> Homo sapiens

<400> 2188  
Met Glu Trp Lys Thr Leu Leu Asn Asp Thr Arg Phe Gly Gly Val Ala  
1 5 10 15  
Ser Leu Asp Gly Thr Arg Gly Arg Ser Glu Phe Gln Lys Asp His Asp  
20 25 30  
Arg Ile Ile Phe Ser Glu Ala Phe Arg Lys Leu Gly Arg Lys Thr Gln  
35 40 45  
Val His Pro  
50

<210> 2189  
<211> 1412  
<212> DNA  
<213> Homo sapiens

<400> 2189  
ntcgcttcat ggtgcgcaat tacgacaacg ccaagtctca gaatgccgag gcttacaccg  
60  
cgttcttcca cgcgatgcta gatgccgggg tcaacctgcc gccatcgtgc tttgaggcct  
120  
ggttcctctc ggacgctcac gacgacgaag ctttcgaggt tttccgcgcc gccctgccga  
180  
gggctgcccc ggcggctgcc caggtgatca gtgcctgaca ccgggctgac ttcgcaggtc  
240

atcgaggcaa tctgtgcctg gttcgacgcc aacggacgcg atctgccgtg gcgccgaccc  
300  
ggcacctccg cgtggggcgt gcttgtttagc gaggtcatga gccaacagac cccgatgtcc  
360  
cgggtgatcg ggccgtggca cgagtggatg aaccgctggc ccaccctga tgatttggcg  
420  
gaggaggact ctggggaagc ggttgccgcg tgggggcgcc tgggttaccg gcgtcgggcc  
480  
ttacgcctgc attcctgtgc cgtcacgac gccaccgagc acgacggggg tgtgccaac  
540  
agtgcgacg agctcgtgc cctcccggtt attggcgact acaccgcgag cgcagtcgtc  
600  
tcttttgcgt ttggcgggcg cgccacagt cttgacacca atgtacgtcg cctcatcgct  
660  
agagcagagt ctgggatcgc aaactgtcca acctcgggtga cgagggtga gcgggtagtc  
720  
gccgacgcgt tggttcccg cgaagacgtc cgagcggcca agtgggcggt ggcgtcgatg  
780  
gaattggggg cactggtatg cacggcgcg tctccgcagt gtgaggtctg cccgatccgg  
840  
gatggctgca ggtgggtgat cgacggtagg ccggacaatg ccccgcccg tcgaggacag  
900  
ccatggaagg gcacggatcg ccagtgccgc ggcgtgatta tggacgtggt gcgcaacagc  
960  
cctcacgggg tgaaggcca gatggctctt tccgcctggc ccgagctcga tcaggcatca  
1020  
aggtgcctgg aatccttact cgatgacggt ttagtgacc gacgaggtaa ccttattagc  
1080  
ctgtgacctg agaaattctt ggccccgacc acccaaacag accgagtcca gcagtgatgc  
1140  
cgctgggtta tccttagagg cggctcctcaa attggatcag ccaaaccacg tcaccgatca  
1200  
agacaccatg agcacaacac ccaaacagcc gcgcacggcg acagctgcc gacgccgaca  
1260  
cattgtcgac catctgcgtt ctttggggca ctggagtc atcgagatc tttaccaact  
1320  
gttcggtgtc tctacatcga cgattcgccg cgatgtcgat gccctctcgg atgaatccaa  
1380  
gatctggaag atttccgggg gagacgtcat ga  
1412

<210> 2190

<211> 292

<212> PRT

<213> Homo sapiens

<400> 2190

Ser	Val	Pro	Asp	Thr	Gly	Leu	Thr	Ser	Gln	Val	Ile	Glu	Ala	Ile	Cys
1				5				10						15	
Ala	Trp	Phe	Asp	Ala	Asn	Gly	Arg	Asp	Leu	Pro	Trp	Arg	Arg	Pro	Gly
			20					25					30		
Thr	Ser	Ala	Trp	Gly	Val	Leu	Val	Ser	Glu	Val	Met	Ser	Gln	Gln	Thr
		35				40					45				
Pro	Met	Ser	Arg	Val	Ile	Gly	Pro	Trp	His	Glu	Trp	Met	Asn	Arg	Trp

50 55 60  
Pro Thr Pro Asp Asp Leu Ala Glu Glu Asp Ser Gly Glu Ala Val Ala  
65 70 75 80  
Ala Trp Gly Arg Leu Gly Tyr Pro Arg Arg Ala Leu Arg Leu His Ser  
85 90 95  
Cys Ala Val Thr Ile Ala Thr Glu His Asp Gly Gly Val Pro Asn Ser  
100 105 110  
Asp Asp Glu Leu Val Ala Leu Pro Gly Ile Gly Asp Tyr Thr Ala Ser  
115 120 125  
Ala Val Val Ser Phe Ala Phe Gly Gly Arg Ala Thr Val Leu Asp Thr  
130 135 140  
Asn Val Arg Arg Leu Ile Ala Arg Ala Glu Ser Gly Ile Ala Asn Cys  
145 150 155 160  
Pro Thr Ser Val Thr Arg Ala Glu Arg Val Val Ala Asp Ala Leu Val  
165 170 175  
Pro Asp Glu Asp Val Arg Ala Ala Lys Trp Ala Val Ala Ser Met Glu  
180 185 190  
Leu Gly Ala Leu Val Cys Thr Ala Arg Ser Pro Gln Cys Glu Val Cys  
195 200 205  
Pro Ile Arg Asp Gly Cys Arg Trp Val Ile Asp Gly Arg Pro Asp Asn  
210 215 220  
Ala Pro Ala Arg Arg Gly Gln Pro Trp Lys Gly Thr Asp Arg Gln Cys  
225 230 235 240  
Arg Gly Val Ile Met Asp Val Val Arg Asn Ser Pro His Gly Val Lys  
245 250 255  
Val Gln Met Ala Leu Ser Ala Trp Pro Glu Leu Asp Gln Ala Ser Arg  
260 265 270  
Cys Leu Glu Ser Leu Leu Asp Asp Gly Leu Val His Arg Arg Gly Asn  
275 280 285  
Leu Ile Ser Leu  
290

<210> 2191  
<211> 502  
<212> DNA  
<213> Homo sapiens

<400> 2191  
nnacgcgtcg agaattctcta ctctgccccg aacaacgtcc ggcttcgtca ggctcacgat  
60  
gactcccttg acgacgacac catttccggg ggtagccac attggtgctg cctcatggac  
120  
tacattgaat cccgttcaat cctgaacggc gttcaggacg tctccagtct cggaaggacc  
180  
agagtattgc tgaatctagc cgacatgacc gaacgcggcc tgagggggga gtccattacc  
240  
cgcgaggagg cctcgagat tcttcgcagc agtgatgatg agctcatgtc aatcatcgcc  
300  
gccgccggaa aagtgcgtcg ccactttttc gataaccggg ttgcctcaa ctacctggtc  
360  
aacctcaagt ccggcctgtg tcccgaagac tgctcctatt gctcgcagcg tctgggatcg  
420  
cgtgccgaga tcacgaaata ctctggggc gatccgcaga aggtacacga cgccgtcgag  
480

gctgggattg ccggtggtgc ac  
502

<210> 2192  
<211> 104  
<212> PRT  
<213> Homo sapiens

<400> 2192  
Leu Asn Leu Ala Asp Met Thr Glu Arg Gly Leu Arg Gly Glu Ser Ile  
1 5 10 15  
Thr Arg Glu Glu Ala Leu Glu Ile Leu Arg Ser Ser Asp Asp Glu Leu  
20 25 30  
Met Ser Ile Ile Ala Ala Ala Gly Lys Val Arg Arg His Phe Phe Asp  
35 40 45  
Asn Arg Val Arg Leu Asn Tyr Leu Val Asn Leu Lys Ser Gly Leu Cys  
50 55 60  
Pro Glu Asp Cys Ser Tyr Cys Ser Gln Arg Leu Gly Ser Arg Ala Glu  
65 70 75 80  
Ile Thr Lys Tyr Ser Trp Ala Asp Pro Gln Lys Val His Asp Ala Val  
85 90 95  
Glu Ala Gly Ile Ala Gly Gly Ala  
100

<210> 2193  
<211> 321  
<212> DNA  
<213> Homo sapiens

<400> 2193  
ccatggggaa tgcagagcac ggacagtcac acagactgtc ctctctggcc ttctggaccc  
60  
aacatactcc tcttgccaac tgggtattac tggaccttac tgggccttac tggacccaac  
120  
atactcctct tgccaactgg ggatttaaaa attttaaaag cccctttatc tccctccaca  
180  
agtcatgtac tgccaacagg gacacactgt tttctttgga aacctgtctg tgtgcccaga  
240  
cagaggtccc actgccctgg gacagctccc ttgcctanag gggaaggagg gtgtgtgtgc  
300  
tgtgtgtgtt taggttgggg a  
321

<210> 2194  
<211> 106  
<212> PRT  
<213> Homo sapiens

<400> 2194  
Met Gly Asn Ala Glu His Gly Gln Ser His Arg Leu Ser Ser Leu Ala  
1 5 10 15  
Phe Trp Thr Gln His Thr Pro Leu Ala Asn Trp Val Leu Leu Asp Leu  
20 25 30  
Thr Gly Pro Tyr Trp Thr Gln His Thr Pro Leu Ala Asn Trp Gly Phe

```

      35      40      45
Lys Asn Phe Lys Ser Pro Phe Ile Ser Leu His Lys Ser Cys Thr Ala
      50      55      60
Asn Arg Asp Thr Leu Phe Ser Leu Glu Thr Leu Leu Cys Ala Gln Thr
65      70      75      80
Glu Val Pro Leu Pro Trp Asp Ser Ser Leu Ala Xaa Arg Gly Arg Arg
      85      90      95
Val Cys Val Leu Cys Val Phe Arg Leu Gly
      100      105

```

<210> 2195  
 <211> 504  
 <212> DNA  
 <213> Homo sapiens

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<400> 2195
naccggtctc cctacatcaa tgcccaccgc gattgcacct ttgttgatcat gctccctggc
60
gacggtgtgg cacaccccaa ctttggcaat atcggtccacg acctggtgct gttgcacagc
120
ctgggtgtgc gtctggtact ggtccacggt tcgcgcccgc agatcgacag ccgccttgag
180
gcacgaggcc tggtagcgta ttaccacaag ggcattgctg tcaccgatgc atcaacgctc
240
gaatgctga tcgatgctgt cgggcaactg cgcattgcca ttgaagcgcg cttgtcgatg
300
gacatggcgt cttcgccaat gcagggttcg cgtctgcgcg tagccagcgg caacctggtc
360
actgcgcggc cgatcggcgt gctcgacggt gtggattttc accataccgg cgaagtgcgc
420
cgggtggacc gcaagggcat caaccgctg ctgatgagc gctcgattgt gctgctgtcg
480
cccttgggtt actcgccac cggt
504

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<210> 2196  
 <211> 168  
 <212> PRT  
 <213> Homo sapiens

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<400> 2196
Xaa Ala Ser Pro Tyr Ile Asn Ala His Arg Asp Cys Thr Phe Val Val
1      5      10      15
Met Leu Pro Gly Asp Gly Val Ala His Pro Asn Phe Gly Asn Ile Val
20      25      30
His Asp Leu Val Leu Leu His Ser Leu Gly Val Arg Leu Val Leu Val
35      40      45
His Gly Ser Arg Pro Gln Ile Asp Ser Arg Leu Glu Ala Arg Gly Leu
50      55      60
Val Pro Tyr Tyr His Lys Gly Met Arg Val Thr Asp Ala Ser Thr Leu
65      70      75      80
Glu Cys Val Ile Asp Ala Val Gly Gln Leu Arg Ile Ala Ile Glu Ala
85      90      95
Arg Leu Ser Met Asp Met Ala Ser Ser Pro Met Gln Gly Ser Arg Leu

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100 105 110  
Arg Val Ala Ser Gly Asn Leu Val Thr Ala Arg Pro Ile Gly Val Leu  
115 120 125  
Asp Gly Val Asp Phe His His Thr Gly Glu Val Arg Arg Val Asp Arg  
130 135 140  
Lys Gly Ile Asn Arg Leu Leu Asp Glu Arg Ser Ile Val Leu Leu Ser  
145 150 155 160  
Pro Leu Gly Tyr Ser Pro Thr Gly  
165

<210> 2197  
<211> 351  
<212> DNA  
<213> Homo sapiens

<400> 2197  
acaagtcctg cgacgattcg ctttccggag gcgggcccag gaatggtaat gaaacccgag  
60  
ttatggggcc ctgcgctcga cgagattgcc gcgggaaaac gtgccggagg ggctgaacag  
120  
ttagattccg cagtgcagca catccacggt gctactcacg ataaactgtc cgggtgctgtt  
180  
ccgaaacgct acgatggtcg ggatgtcttg gcaggcgagg acccgaatgc accgttgctg  
240  
cttgtgcta gcccggtgg tgcagtgttt agtcaaaata aggcacaagc ctggtccaat  
300  
gaagaccaca ttgttttgc ctgtgggcgc tatgaaggta ttgatcaacg c  
351

<210> 2198  
<211> 117  
<212> PRT  
<213> Homo sapiens

<400> 2198  
Thr Ser Pro Ser Thr Ile Arg Phe Pro Glu Ala Gly Pro Gly Met Val  
1 5 10 15  
Met Lys Pro Glu Leu Trp Gly Pro Ala Leu Asp Glu Ile Ala Ala Gly  
20 25 30  
Lys Arg Ala Gly Gly Ala Glu Gln Leu Asp Ser Ala Val Gln His Ile  
35 40 45  
His Gly Ala Thr His Asp Lys Leu Ser Gly Ala Val Pro Lys Arg Tyr  
50 55 60  
Asp Gly Arg Asp Val Leu Ala Gly Glu Asp Pro Asn Ala Pro Leu Leu  
65 70 75 80  
Leu Val Pro Ser Pro Ala Gly Ala Val Phe Ser Gln Asn Lys Ala Gln  
85 90 95  
Ala Trp Ser Asn Glu Asp His Ile Val Phe Ala Cys Gly Arg Tyr Glu  
100 105 110  
Gly Ile Asp Gln Arg  
115

<210> 2199  
<211> 457

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2199

agacgccggc cgccaagatc tgcattcccta ggccacgcta agaccctggg gaagagcgca  
60  
ggagcccggg agaagggctg gaaggagggg actggacgtg cggagaattc cccctaaaa  
120  
ggcagaagcc cccgccccca cctccgagc tccgttcggg cagagcgctt gcctgcctgc  
180  
cggttgcggg ggcgcccacc tcgcccagcc atgccaggcc cggccaccga cgcggggaag  
240  
atccctttct gcgacgcaa ggaagaaatc cgtgccgggc tcgaaagctc tgagggcggc  
300  
ggcgggcccg agaggccagg cgcgcgcggg cagcggcaga acatcgtctg gaggaatgtc  
360  
gtcctgatga gcttgcctca cttggggggc gtgtactccc tgggtgctcat ccccaaagcc  
420  
aagccactca ctctgctctg gggtaagtcc cgccggc  
457

&lt;210&gt; 2200

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2200

Arg Arg Arg Pro Pro Arg Ser Ala Ser Leu Gly His Ala Lys Thr Leu  
1 5 10 15  
Gly Lys Ser Ala Gly Ala Arg Glu Lys Gly Trp Lys Glu Gly Thr Gly  
20 25 30  
Arg Ala Glu Asn Ser Pro Leu Lys Gly Arg Ser Pro Arg Pro His Pro  
35 40 45  
Pro Ser Ser Val Arg Ala Glu Arg Leu Pro Ala Cys Arg Cys Trp Gly  
50 55 60  
Arg Pro Pro Arg Pro Ala Met Pro Gly Pro Ala Thr Asp Ala Gly Lys  
65 70 75 80  
Ile Pro Phe Cys Asp Ala Lys Glu Glu Ile Arg Ala Gly Leu Glu Ser  
85 90 95  
Ser Glu Gly Gly Gly Gly Pro Glu Arg Pro Gly Ala Arg Gly Gln Arg  
100 105 110  
Gln Asn Ile Val Trp Arg Asn Val Val Leu Met Ser Leu Leu His Leu  
115 120 125  
Gly Ala Val Tyr Ser Leu Val Leu Ile Pro Lys Ala Lys Pro Leu Thr  
130 135 140  
Leu Leu Trp Gly Lys Ser Arg Arg  
145 150

&lt;210&gt; 2201

&lt;211&gt; 336

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2201



agtactgcga tggacagcta tgtcgtggat ggtggtcgca aattacatgt ttgtggtaac  
60  
aaccctgatt gcgatgggta tgaagtcgaa gaaggcgaat tcaagatcaa gggttatgat  
120  
ggtccgacta tcccatgcga taaatgtgat ggtgagatgc agcttaaaac gggtcgtttt  
180  
ggtccatatt tcgcatgtac tagctgtgac aatactcgta aggtactcaa gagtgggtcaa  
240  
cctgctccgc cacgtgtaga cccaatcaaa atggagcatc tacgttcaac gaagcatgat  
300  
gatttcttcg tcttacgtga gggcgctgct ggttta  
336

<210> 2202  
<211> 112  
<212> PRT  
<213> Homo sapiens

<400> 2202  
Ser Thr Ala Met Asp Ser Tyr Val Val Asp Gly Gly Arg Lys Leu His  
1 5 10 15  
Val Cys Gly Asn Asn Pro Asp Cys Asp Gly Tyr Glu Val Glu Glu Gly  
20 25 30  
Glu Phe Lys Ile Lys Gly Tyr Asp Gly Pro Thr Ile Pro Cys Asp Lys  
35 40 45  
Cys Asp Gly Glu Met Gln Leu Lys Thr Gly Arg Phe Gly Pro Tyr Phe  
50 55 60  
Ala Cys Thr Ser Cys Asp Asn Thr Arg Lys Val Leu Lys Ser Gly Gln  
65 70 75 80  
Pro Ala Pro Pro Arg Val Asp Pro Ile Lys Met Glu His Leu Arg Ser  
85 90 95  
Thr Lys His Asp Asp Phe Phe Val Leu Arg Glu Gly Ala Ala Gly Leu  
100 105 110

<210> 2203  
<211> 273  
<212> DNA  
<213> Homo sapiens

<400> 2203  
ctcgagagat gcagtcccag ccgggggtggg aagctgtgca gacagccccg gatctgggac  
60  
gtgatggaaa actcaacaga ctgggttcaga tcttggcccc gagcccagag gcaccgggga  
120  
ccccagggc tgtttctccc tggccacacc agtaccacac ttccaaatgc cctgtagggtg  
180  
accaccaggc cacacaggcc cgtctgaggg gccacaggct gtgcaccatg ggacgcaggc  
240  
ctgtccctgc ctccctccga tgcctgatg gtg  
273

<210> 2204  
<211> 88  
<212> PRT

<213> Homo sapiens

<400> 2204

```

Met Gln Ser Gln Pro Gly Trp Glu Ala Val Gln Thr Ala Pro Asp Leu
 1           5           10           15
Gly Arg Asp Gly Lys Leu Asn Arg Leu Val Gln Ile Leu Ala Arg Ser
          20           25           30
Pro Glu Ala Pro Gly Thr Pro Arg Ala Val Ser Pro Trp Pro His Gln
          35           40           45
Tyr Pro Thr Ser Lys Cys Pro Val Gly Asp His Gln Ala Thr Gln Ala
          50           55           60
Arg Leu Arg Gly His Arg Leu Cys Thr Met Gly Arg Arg Pro Val Pro
65           70           75           80
Ala Ser Leu Arg Cys Pro Asp Gly
          85

```

<210> 2205

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2205

```

gnnnnnggng nnnnactggt gtgcatgggt aaaatcctgc aagctactgg gttgccacag
60
catctgtccc actttgtggt ctgcaaatac agcttctggg atcaacagga gccggtgatt
120
gtcgtcctcg aagtggacac ctctcctct tccgtcagca aggagccgca ctgcatgggt
180
gtctttgatc attgcaatga gttttctggt aacatcaccg aagactttat cgagcatctt
240
tccgaaggag cattggcaat tgaagtatat ggacataaaa taaacgatcc ccggaaaaac
300
cccgccctgt gggatttggg aatcatccaa gcaaagacac gtagtcttcg ggacagatgg
360
agtgaagtgc ccaggaaatt ggaattc
387

```

<210> 2206

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2206

```

Xaa Xaa Gly Xaa Xaa Leu Val Cys Met Val Lys Ile Leu Gln Ala Thr
 1           5           10           15
Gly Leu Pro Gln His Leu Ser His Phe Val Phe Cys Lys Tyr Ser Phe
          20           25           30
Trp Asp Gln Gln Glu Pro Val Ile Val Ala Pro Glu Val Asp Thr Ser
          35           40           45
Ser Ser Ser Val Ser Lys Glu Pro His Cys Met Val Val Phe Asp His
          50           55           60
Cys Asn Glu Phe Ser Val Asn Ile Thr Glu Asp Phe Ile Glu His Leu
65           70           75           80
Ser Glu Gly Ala Leu Ala Ile Glu Val Tyr Gly His Lys Ile Asn Asp

```

			85				90				95				
Pro	Arg	Lys	Asn	Pro	Ala	Leu	Trp	Asp	Leu	Gly	Ile	Ile	Gln	Ala	Lys
			100					105					110		
Thr	Arg	Ser	Leu	Arg	Asp	Arg	Trp	Ser	Glu	Val	Pro	Arg	Lys	Leu	Glu
			115				120					125			
Phe															

<210> 2207  
 <211> 667  
 <212> DNA  
 <213> Homo sapiens

<400> 2207  
 atctccaacc ccgagaccct ctccaatata gccggcttcg agggctacat cgacctgggc  
 60  
 cgcgagctct ccagcctgca ctcactgctc tgggaggccg tcagccagct ggagcagagc  
 120  
 atagtatcca aactgggacc cctgcctcgg atcctgaggg acgtccacac agcactgagc  
 180  
 accccaggta gcgggcagct ccaggggacc aatgacctgg cctccacacc gggctctggc  
 240  
 agcagcagca tctcagctgg gctgcagaag atggtgattg agaacgatct ttccggtctg  
 300  
 atagatttca cccggttacc gtctccaacc cccgaaaaca aggacttggt ttttgtcaca  
 360  
 aggtcctccg gggtcagcc ctcacctgcc cgcagctcga gttactcgga agccaacgag  
 420  
 cctgatcttc agatggccaa cgggtggcaag agcctctcca tgggtggacct ccaggacgcc  
 480  
 cgcacgctgg atggggagge aggtccccg gcgggccccg acgtcctccc cacagatggg  
 540  
 caggccgctg cagctcagct ggtggccggg tggccggccc gggcaacccc agtgaacctg  
 600  
 gcagggtgg ccacgggtgc gcgggcagge cagacaccaa ccacaccagg cacctccgag  
 660  
 ggcgcgcc  
 667

<210> 2208  
 <211> 222  
 <212> PRT  
 <213> Homo sapiens

Ile	Ser	Asn	Pro	Glu	Thr	Leu	Ser	Asn	Thr	Ala	Gly	Phe	Glu	Gly	Tyr
1			5					10					15		
Ile	Asp	Leu	Gly	Arg	Glu	Leu	Ser	Ser	Leu	His	Ser	Leu	Leu	Trp	Glu
			20				25					30			
Ala	Val	Ser	Gln	Leu	Glu	Gln	Ser	Ile	Val	Ser	Lys	Leu	Gly	Pro	Leu
			35				40				45				
Pro	Arg	Ile	Leu	Arg	Asp	Val	His	Thr	Ala	Leu	Ser	Thr	Pro	Gly	Ser
			50			55				60					
Gly	Gln	Leu	Pro	Gly	Thr	Asn	Asp	Leu	Ala	Ser	Thr	Pro	Gly	Ser	Gly

```

65          70          75          80
Ser Ser Ser Ile Ser Ala Gly Leu Gln Lys Met Val Ile Glu Asn Asp
          85          90          95
Leu Ser Gly Leu Ile Asp Phe Thr Arg Leu Pro Ser Pro Thr Pro Glu
          100          105          110
Asn Lys Asp Leu Phe Phe Val Thr Arg Ser Ser Gly Val Gln Pro Ser
          115          120          125
Pro Ala Arg Ser Ser Ser Tyr Ser Glu Ala Asn Glu Pro Asp Leu Gln
          130          135          140
Met Ala Asn Gly Gly Lys Ser Leu Ser Met Val Asp Leu Gln Asp Ala
145          150          155          160
Arg Thr Leu Asp Gly Glu Ala Gly Ser Pro Ala Gly Pro Asp Val Leu
          165          170          175
Pro Thr Asp Gly Gln Ala Ala Ala Ala Gln Leu Val Ala Gly Trp Pro
          180          185          190
Ala Arg Ala Thr Pro Val Asn Leu Ala Gly Leu Ala Thr Val Arg Arg
          195          200          205
Ala Gly Gln Thr Pro Thr Thr Pro Gly Thr Ser Glu Gly Ala
          210          215          220

```

<210> 2209  
 <211> 353  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2209
ngggaagttg gtactagcct cccaaagcca ctctcctgag tgacattgag agcatcctat
60
agagaaggcc atgagagaga tagcactggg acagatgggtg tcagcagagg ggactccaga
120
ccacagcaga agtgaccaag ctgtagcttc cttagatggc cccaaggggtg ggaggcttca
180
cacagcagag cctgggtctg gaggcacctt ggggatgttt ttccccatta ggcccctgag
240
ctctatggaa gcacttaact gcctgttccc cgcttattct gtgttttaaac caaggaaaca
300
acatgcctgg ggtctgaaat cctggattca aatcctgact gtgttggtgtg ctt
353

```

<210> 2210  
 <211> 94  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2210
Met Arg Glu Ile Ala Leu Gly Gln Met Val Ser Ala Glu Gly Thr Pro
1      5      10      15
Asp His Ser Arg Ser Asp Gln Ala Val Ala Ser Leu Asp Gly Pro Lys
          20      25      30
Gly Gly Arg Leu His Thr Ala Glu Pro Gly Ser Gly Gly Thr Leu Gly
          35      40      45
Met Phe Phe Pro Ile Arg Pro Leu Ser Ser Met Glu Ala Leu Asn Cys
          50      55      60
Leu Phe Pro Ala Tyr Ser Val Phe Lys Pro Arg Lys Gln His Ala Trp

```

65                      70                      75                      80  
Gly Leu Lys Ser Trp Ile Gln Ile Leu Thr Val Leu Cys Ala  
                      85                      90

```
<210> 2211
<211> 493
<212> DNA
<213> Homo sapiens
```

```

<400> 2211
ctgaccacat ctccgacgat cctagacctc tgttctgcat ctcggaacacc accgactgct
60
cactgtaccc tgggactgca cagagggaaa cgattaccaa acccagagac ggggaccgga
120
aggaaggagg ggaaggggat ggatccatgt actttgggggt tggagaaatg ggggacagca
180
agtctctcca acccaaatac agccccctg ggaggctcct gccccgtctc tgtggatagt
240
gagcccagct gcaagggcg gctgccaggg acaaaccac caaaaggaaa gatgttgtag
300
aaccaaagag aggctccctg aaagaggcgt ctcccggggc ctccaagccc gggagcgccc
360
ggcggacagg gggcagtggc caagtctgtg cggaccctga ccgcctcaga gaacgagagc
420
atgcgcaaag tcatgcccac caccaagtcc agcagaggcg ccggctggag gcgaccagag
480
ctgtcatccc ggg
493

```

```
<210> 2212
<211> 126
<212> PRT
<213> Homo sapiens
```

<400> 2212																
Met	Gly	Met	Thr	Leu	Arg	Met	Leu	Ser	Phe	Ser	Glu	Ala	Val	Arg	Val	
1				5					10					15		
Arg	Thr	Asp	Leu	Ala	Thr	Ala	Pro	Cys	Pro	Pro	Gly	Ala	Pro	Gly	Leu	
			20					25					30			
Gly	Gly	Pro	Gly	Arg	Arg	Leu	Phe	Gln	Gly	Ala	Ser	Leu	Trp	Phe	Tyr	
		35					40					45				
Asn	Ile	Phe	Pro	Phe	Gly	Gly	Phe	Val	Pro	Gly	Arg	Pro	Pro	Leu	Gln	
	50					55					60					
Leu	Gly	Ser	Leu	Ser	Thr	Glu	Thr	Gly	Gln	Glu	Pro	Pro	Arg	Gly	Ala	
65					70					75					80	
Val	Phe	Gly	Leu	Arg	Arg	Leu	Ala	Val	Pro	His	Phe	Ser	Asn	Pro	Lys	
				85					90					95		
Val	His	Gly	Ser	Ile	Pro	Phe	Pro	Ser	Phe	Leu	Pro	Val	Pro	Val	Ser	
			100					105					110			
Gly	Phe	Gly	Asn	Arg	Phe	Pro	Leu	Cys	Ser	Pro	Arg	Val	Gln			
		115					120					125				

<210> 2213  
<211> 327

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2213

```
acgcgtccga ccggcagttc cggcagctgc gggaaagctg cgatgcgctc gccgagcatt
60
gccggtgctt cgacacactg gggtatatcg ccctcaaagc acaggtctac gaagggtctg
120
acggaaggcc cggccaatcc gatcgcgggc tcggcgctgc gcatcatccg ggcgcgctg
180
tcgcagctct ggggcacgtc gctgctccgc aacggacggg cggaacagag tgtggtggag
240
atcgcccggg ttgctgacgc gatcacgtca cgggacgagg aagccgcca gcgtgcactg
300
ctcgaccaca atcgacgcgc gttggaa
327
```

&lt;210&gt; 2214

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2214

```
Met Arg Ser Pro Ser Ile Ala Gly Ala Ser Thr His Trp Val Ile Ser
 1           5           10          15
Pro Ser Lys His Arg Ser Thr Lys Val Leu Thr Glu Gly Pro Ala Asn
      20           25           30
Pro Ile Ala Ala Ser Ala Leu Arg Ile Ile Arg Ala Arg Val Ser Gln
      35           40           45
Leu Trp Gly Thr Ser Leu Leu Arg Asn Gly Arg Ala Glu Gln Ser Val
      50           55           60
Val Glu Ile Ala Arg Leu Val Asp Ala Ile Thr Ser Arg Asp Glu Glu
65           70           75           80
Ala Ala Gln Arg Ala Leu Leu Asp His Asn Arg Ser Ala Leu Glu
      85           90           95
```

&lt;210&gt; 2215

&lt;211&gt; 430

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2215

```
ctggggatca tgccctacat cactgcgtcg atcatcctgc agctgctgac agtcgtgatc
60
ccgaagctgg aaacccttaa gaaggagggc gcgtccggtc agaacaagat caccagtac
120
accggttacc tactctcgt gcttggcctg ttgcaggcaa cggccttcgt cacgcttgcc
180
acctccggcc gtctattcac cnntgcagct ntgccagtcg tctactccac ctcggtcttc
240
gaagtcgtcg tcatgatcct gactatgacg gccggtacga ccatcgcat gtggatgggt
300
gagctcatca ccgaccgcg tatcggcaac ggtatgtcga tcatgatttt cactcagatt
360
```

gcggcgcggtt tccctgactc gctgtgggtct atcaagggtcg ctcgaaatgg cgccgggtcag  
420  
gctcacgcgt  
430

<210> 2216  
<211> 143  
<212> PRT  
<213> Homo sapiens

<400> 2216  
Leu Gly Ile Met Pro Tyr Ile Thr Ala Ser Ile Ile Leu Gln Leu Leu  
1 5 10 15  
Thr Val Val Ile Pro Lys Leu Glu Thr Leu Lys Lys Glu Gly Ala Ser  
20 25 30  
Gly Gln Asn Lys Ile Thr Gln Tyr Thr Arg Tyr Leu Thr Leu Val Leu  
35 40 45  
Gly Leu Leu Gln Ala Thr Ala Phe Val Thr Leu Ala Thr Ser Gly Arg  
50 55 60  
Leu Phe Thr Xaa Ala Ala Xaa Pro Val Val Tyr Ser Thr Ser Val Phe  
65 70 75 80  
Glu Val Val Val Met Ile Leu Thr Met Thr Ala Gly Thr Thr Ile Val  
85 90 95  
Met Trp Met Gly Glu Leu Ile Thr Asp Arg Gly Ile Gly Asn Gly Met  
100 105 110  
Ser Ile Met Ile Phe Thr Gln Ile Ala Ala Arg Phe Pro Asp Ser Leu  
115 120 125  
Trp Ser Ile Lys Val Ala Arg Asn Gly Ala Gly Gln Ala His Ala  
130 135 140

<210> 2217  
<211> 444  
<212> DNA  
<213> Homo sapiens

<400> 2217  
accagggccg cttcgaagga cctctctcca gctatcgtga cgacgacggc gaagcgggct  
60  
atgacgtggc tcgatgacga cgtgggcgcc gacctgttga atcaggctga ttccatggac  
120  
catgccctgg aggccaccgt cccagggtcgg gtcaccacgc cggacgcca agtcatccag  
180  
acctgtgccg tggtgcgtga ccttgctcgc gtggcagtca gccagctggg ccgaaatgac  
240  
gaggactcta gggaaccagt cgatgcggag agagtacagg ctcaagcgnc gatgcgggag  
300  
gttttcgaga ccgccgaacg catggtgggg ctggccgccg ccgacgtggt gtgggtctct  
360  
gagtctgaga agggataccg cagcattcac gtcgtccgc tgagtgttgg cggcttgcta  
420  
cgagagaatg tctttgctca gtcc  
444

<210> 2218

<211> 148  
<212> PRT  
<213> Homo sapiens

<400> 2218  
Thr Arg Ala Ala Ser Lys Asp Leu Ser Pro Ala Ile Val Thr Thr Thr  
1 5 10 15  
Ala Lys Arg Ala Met Thr Trp Leu Asp Asp Asp Val Gly Ala Asp Leu  
20 25 30  
Leu Asn Gln Ala Asp Ser Met Asp His Ala Leu Glu Ala Thr Val Pro  
35 40 45  
Gly Arg Val Thr Thr Pro Asp Ala Gln Val Ile Gln Thr Cys Ala Val  
50 55 60  
Leu Arg Asp Leu Ala Arg Val Ala Val Ser Gln Leu Gly Arg Asn Asp  
65 70 75 80  
Glu Asp Ser Arg Glu Pro Val Asp Ala Glu Arg Val Gln Ala Gln Ala  
85 90 95  
Xaa Met Arg Glu Val Phe Glu Thr Ala Glu Arg Met Val Gly Leu Ala  
100 105 110  
Ala Ala Asp Val Val Trp Val Ser Glu Ser Glu Lys Gly Tyr Arg Ser  
115 120 125  
Ile His Val Ala Pro Leu Ser Val Gly Gly Leu Leu Arg Glu Asn Val  
130 135 140  
Phe Ala Gln Ser  
145

<210> 2219  
<211> 688  
<212> DNA  
<213> Homo sapiens

<400> 2219  
acgcgtaccg tcgttggcat gacgctcctg ccactggaaa ttggtctgtc attcagctac  
60  
ggcattacga atatggcgtg gatgtggcta tggttcgacg agcccggaag ccgttgggag  
120  
tggtcgatcc ttttccccgc tgggtggctg accagcgtt tggtcagtca ggggttcggt  
180  
ggaatgttcc atagtgtgca gattgcgcgt catgtcagca gttaccacgg catcatggtc  
240  
gctttcgcgc tcgttgggta cggatggctt gcgatgcaca acttgcgtca ccctgatgag  
300  
cgctattcga ttcgctcggc cttgataatc ggcatcggca tccagttcac ctgggaggca  
360  
gtgctgatga tctcgggtat caggccgttg acatggcgcc cgcttggtat cgattctctc  
420  
atcgagacga atctcggcgc tccgttcatt ttgctcattg tgaaagcttg gcgcgcgcca  
480  
cccgaaggaa ttcctggctc taccagtccg cgcccgaccg cccgtggcac agcgcgagtc  
540  
tatatgaggg atgatcttgt ttctcgacgc cttctacagc gtccttgaga gcctctgcga  
600  
gcgaagggcg cgggtgtagg tctccccggg gctcgttgtg gtccctcctc tgcgtgacgc  
660



agagccgtgt gatgaggcga agtcatga  
688

<210> 2220

<211> 189

<212> PRT

<213> Homo sapiens

<400> 2220

Met Ser Val Leu Pro Leu Glu Ile Trp Leu Ser Phe Ser Tyr Gly Ile  
1 5 10 15  
Thr Asn Met Ala Trp Met Trp Leu Trp Phe Asp Glu Pro Gly Asn Arg  
20 25 30  
Trp Glu Trp Ser Ile Leu Phe Pro Ala Gly Trp Leu Thr Ser Ala Leu  
35 40 45  
Val Ser Gln Gly Phe Gly Gly Met Phe His Ser Val Gln Ile Ala Arg  
50 55 60  
His Val Ser Ser Tyr His Gly Ile Met Val Ala Phe Ala Leu Val Gly  
65 70 75 80  
Tyr Gly Trp Leu Ala Met His Asn Leu Arg His Pro Asp Glu Arg Tyr  
85 90 95  
Ser Ile Arg Ser Ala Leu Ile Ile Gly Ile Gly Ile Gln Phe Thr Trp  
100 105 110  
Glu Ala Val Leu Met Ile Ser Gly Ile Arg Pro Leu Thr Trp Arg Pro  
115 120 125  
Leu Val Ile Asp Ser Leu Ile Glu Thr Asn Leu Gly Ala Pro Phe Met  
130 135 140  
Leu Leu Ile Val Lys Ala Trp Arg Ala Pro Pro Glu Gly Ile Pro Gly  
145 150 155 160  
Ser Thr Ser Pro Arg Pro Thr Ala Arg Gly Thr Ala Arg Val Tyr Met  
165 170 175  
Arg Asp Asp Leu Val Ser Arg Arg Leu Leu Gln Arg Pro  
180 185

<210> 2221

<211> 530

<212> DNA

<213> Homo sapiens

<400> 2221

actagtgtag ctgcaatata tactcgggat ttactacagt taagccttat ccttcacccc  
60  
aaagaagagc aaaccgccat cgctaacgtc ctttccgaca tggacaccga actcgacgcc  
120  
ctacaacaac gcctcagtaa aacccaaacc atcaagcaag gcatgatgca agaactactc  
180  
acagggaaaa cgagggttggg atgagccaca aggtgaattt agtgcattgag ctggataagc  
240  
gtattatctc ggtaaatacg ttattgtcac agcctgagct tgctattccg gcttatcagc  
300  
ggccttataa atgggtcaca gagaacctaa atgcgctgat gagtgattta cgaatttatc  
360  
gtaacaaatc ggcttatcgg ctggggacgg tgggtttttca ttatcataat gaaccgtag  
420

acaacgagaa tacccacaag ctggatattg tagacgggtca gcaacgtacc ttaaccttgt  
480  
tgctgctagt caaagccatt ttagaagaac ggttgtctgc gttaacgcgt  
530

<210> 2222  
<211> 67  
<212> PRT  
<213> Homo sapiens

<400> 2222  
Thr Ser Val Ala Ala Ile Tyr Thr Arg Asp Leu Leu Gln Leu Ser Leu  
1 5 10 15  
Ile Leu Pro Pro Lys Glu Glu Gln Thr Ala Ile Ala Asn Val Leu Ser  
20 25 30  
Asp Met Asp Thr Glu Leu Asp Ala Leu Gln Gln Arg Leu Ser Lys Thr  
35 40 45  
Lys Thr Ile Lys Gln Gly Met Met Gln Glu Leu Leu Thr Gly Lys Thr  
50 55 60  
Arg Leu Val  
65

<210> 2223  
<211> 482  
<212> DNA  
<213> Homo sapiens

<400> 2223  
cggccgcccgc ggtagtgagc cctgcgtcgg tggcgtaatg gaaaatgctg cgctgggttg  
60  
acaggcgcgga gacattgttg tggacgatgc cgctgtcgat cgggtggcacg ccggtgaaga  
120  
tgcatttatc caacggccgg gacagggccg gcagttcaca gtccagtttg taaagcgctg  
180  
cgcgtcctgc gctgatatag gcctggagat gccccatggc gtgtcgggca acctcgtagt  
240  
tcaggccgtc gagcaccaca aggatgacgt tgtgcttcat aaggggagac gctccgcaac  
300  
gataggcttg actcatttca cttgaggaac ggggtcaaaa ctgtgggcgc gggcaagccc  
360  
gctccacac aagcccgtgc ccacattgga tctccaatgt gggctacagc cttactgcat  
420  
attgatgatg acttcttctt gccacttctg cggcagtgcc ttggaggtct tttcccacgc  
480  
gt  
482

<210> 2224  
<211> 105  
<212> PRT  
<213> Homo sapiens

<400> 2224  
Met Ser Gln Ala Tyr Arg Cys Gly Ala Ser Pro Leu Met Lys His Asn

1				5					10					15				
Val	Ile	Leu	Val	Val	Leu	Asp	Gly	Leu	Asn	Tyr	Glu	Val	Ala	Arg	His			
			20					25					30					
Ala	Met	Gly	His	Leu	Gln	Ala	Tyr	Ile	Ser	Ala	Gly	Arg	Ala	Ala	Leu			
		35					40					45						
Tyr	Lys	Leu	Asp	Cys	Glu	Leu	Pro	Ala	Leu	Ser	Arg	Pro	Leu	Asp	Lys			
	50					55					60							
Cys	Ile	Phe	Thr	Gly	Val	Pro	Pro	Ile	Asp	Ser	Gly	Ile	Val	His	Asn			
65					70				75					80				
Asn	Val	Ser	Arg	Leu	Ser	Asn	Gln	Arg	Ser	Ile	Phe	His	Tyr	Ala	Thr			
			85					90					95					
Asp	Ala	Gly	Leu	Thr	Thr	Ala	Ala	Ala										
			100					105										

&lt;210&gt; 2225

&lt;211&gt; 753

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2225

nacgcgtctg atccacacgg gccactgacg tggcgttatg acagggagcg ggccgggtgcc  
 60  
 ggcgtcatcc tcgatctcat gggtcacgga gaggatctcg tccagtatct actcaaaggg  
 120  
 cgattcactg aggtgtccgc cgtgtccgag acgttcatcc gtcagcgctcc caagccactc  
 180  
 aaggagggca tcggccacac aggttgggtc gtctcggacg agctcgggccc ggtgggcaac  
 240  
 gaggattatt gcgctgtcat cgcccgtatg gaaaacggag tgatgtgcac cctggagtcc  
 300  
 agtcgggtca gtgttgggcc gcgcgcggag tacatcgctc agatctatgg aaccgacgga  
 360  
 tcaatccggt ggaacttcga ggatctcaac catttgcagg tctgtctggg gcgaaacaat  
 420  
 cgtgccctgc agggatatgt caactgcatg gccggaccag acttcccgga gttcatgcgt  
 480  
 ttccaaccgg gagccggaac atccatgggc tttgacgaca tgaaggctcgt tgaggctgcg  
 540  
 aaattcgtcc gaggggtctt ggatgggcag caatatggcc catctgtcgc cgatgggttg  
 600  
 gcctcagcgg aggtcaacga tgcgatcgtt gcctcctgcg ggggaccatg cctggcatga  
 660  
 cgtgaagccg gtttcgggga gaaccacgtt cgataagtga ccgcgtcatc gcgtgtctgt  
 720  
 gaccaggcct ggcggcacaa ccagggtcgcc ggc  
 753

&lt;210&gt; 2226

&lt;211&gt; 219

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2226

Xaa Ala Ser Asp Pro His Gly Pro Leu Thr Trp Arg Tyr Asp Arg Glu

```

      1           5           10           15
Arg Ala Gly Ala Gly Val Ile Leu Asp Leu Met Gly His Gly Glu Asp
      20           25           30
Leu Val Gln Tyr Leu Leu Lys Gly Arg Phe Thr Glu Val Ser Ala Val
      35           40           45
Ser Glu Thr Phe Ile Arg Gln Arg Pro Lys Pro Leu Lys Glu Gly Ile
      50           55           60
Gly His Thr Gly Trp Val Val Ser Asp Glu Leu Gly Pro Val Gly Asn
      65           70           75           80
Glu Asp Tyr Cys Ala Val Ile Ala Arg Met Glu Asn Gly Val Met Cys
      85           90           95
Thr Leu Glu Ser Ser Arg Val Ser Val Gly Pro Arg Ala Glu Tyr Ile
      100          105          110
Val Glu Ile Tyr Gly Thr Asp Gly Ser Ile Arg Trp Asn Phe Glu Asp
      115          120          125
Leu Asn His Leu Gln Val Cys Leu Gly Arg Asn Asn Arg Ala Leu Gln
      130          135          140
Gly Tyr Val Asn Cys Met Ala Gly Pro Asp Phe Pro Glu Phe Met Arg
      145          150          155          160
Phe Gln Pro Gly Ala Gly Thr Ser Met Gly Phe Asp Asp Met Lys Val
      165          170          175
Val Glu Ala Ala Lys Phe Val Arg Gly Val Leu Asp Gly Gln Gln Tyr
      180          185          190
Gly Pro Ser Val Ala Asp Gly Trp Ala Ser Ala Glu Val Asn Asp Ala
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Ile Val Ala Ser Cys Gly Gly Pro Cys Leu Ala
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&lt;211&gt; 324

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2227

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&lt;210&gt; 2228

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2228

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Met Ala His Leu Leu Lys Thr Val Val Ala Gly Cys Ser Cys Pro Phe

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Lys Pro Gly Ile Pro Tyr Lys Gln Leu Thr Val Gly Val Pro Lys Glu  
50 55 60  
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Glu Ala

&lt;210&gt; 2229

&lt;211&gt; 320

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2229

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&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2230

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Gly Pro Ala Leu Gly Thr Arg His Arg Trp Ile Gln Cys Ile Leu Ser  
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Pro Leu Arg Ser Cys Ala Ala Ile Ser Ser Phe Ser Gly Tyr Arg Ala  
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&lt;210&gt; 2231

&lt;211&gt; 671

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2231

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671

&lt;210&gt; 2232

&lt;211&gt; 177

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2232

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Gly	Val	Arg	Val	Glu	Thr	Gly	Glu	Gly	Ser	Glu	His	Leu	Trp	Asp	Thr
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His	His	Val	Pro	Gly	Thr	Glu	Pro	Tyr	Leu	Asp	Leu	Leu	Gln	Pro	Ser
	50					55				60					
Gln	Trp	His	Cys	Glu	Ala	Ser	Val	Val	Leu	Gln	Met	Arg	Lys	Leu	Arg
65				70					75					80	
Phe	Val	Ala	Ile	Thr	Asp	Lys	Gln	Met	Thr	Leu	Asn	Gly	Ala	Gly	His
			85					90						95	
Val	Ile	Cys	His	Arg	Tyr	Met	His	Arg	Thr	Met	Gln	Thr	Ser	Gln	Ser
			100					105					110		
Pro	Leu	Ser	Gln	Thr	Arg	Leu	Thr	Ile	Arg	Asp	Met	Gln	Thr	Leu	Ala
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Gly	Leu	Gly	Leu	Phe	Pro	Ile	Gly	Asp	Ser	Leu	Val	Pro	Pro	Trp	Pro
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Leu	Met	Pro	Thr	Ala	Val	Trp	Lys	Ala	Gly	Ser	Leu	Leu	Arg	Arg	Gln

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Thr

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65 70 75 80  
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Glu Asp Val Arg Leu Ile Gly Leu Ser Ala Thr Leu Pro Asn Tyr Glu  
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225 230 235 240  
Phe Asp Asn Ser Phe Arg Pro Val Pro Leu Glu Gln Thr Tyr Val Gly  
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Ser Pro Thr Leu Tyr Gly Ile Ser His Asp Asp Leu Lys Gly Asp Pro  
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Gln Val Thr Glu Leu Gly Arg Ile Ala Ser His Tyr Tyr Ile Thr Asn  
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690 695 700  
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725 730 735  
Lys Thr Ile His Lys Tyr Val His Leu Phe Pro Lys Leu Glu Leu Ser  
740 745 750  
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755 760 765  
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785	790	795
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Ile Thr Phe Phe Val Pro Val Phe Glu Pro Leu Pro Pro Gln Tyr Phe		815
	820	825
Ile Arg Val Val Ser Asp Arg Trp Leu Ser Cys Glu Thr Gln Leu Pro		830
	835	840
Val Ser Phe Arg His Leu Ile Leu Pro Glu Lys Tyr Pro Pro Pro Thr		845
	850	855
Glu Leu Leu Asp Leu Gln Pro Leu Pro Val Ser Ala Leu Arg Asn Ser		860
865	870	875
Ala Phe Glu Ser Leu Tyr Gln Asp Lys Phe Pro Phe Phe Asn Pro Ile		880
	885	890
Gln Thr Gln Val Phe Asn Thr Val Tyr Asn Ser Asp Asp Asn Val Phe		895
	900	905
Val Gly Ala Pro Thr Gly Ser Gly Lys Thr Ile Cys Ala Glu Phe Ala		910
	915	920
Ile Leu Arg Met Leu Leu Gln Ser Ser Glu Gly Arg Cys Val Tyr Ile		925
	930	935
Thr Pro Met Glu Ala Leu Ala Glu Gln Val Tyr Met Asp Trp Tyr Glu		940
945	950	955
Lys Phe Gln Asp Arg Leu Asn Lys Lys Val Val Leu Leu Thr Gly Glu		960
	965	970
Thr Ser Thr Asp Leu Lys Leu Leu Gly Lys Gly Asn Ile Ile Ile Ser		975
	980	985
Thr Pro Glu Lys Trp Asp Ile Leu Ser Arg Arg Trp Lys Gln Arg Lys		990
	995	1000
Asn Val Gln Asn Ile Asn Leu Phe Val Val Asp Glu Val His Leu Ile		1005
	1010	1015
Gly Gly Glu Asn Gly Pro Val Leu Glu Val Ile Cys Ser Arg Met Arg		1020
1025	1030	1035
Tyr Ile Ser Ser Gln Ile Glu Arg Pro Ile Arg Ile Val Ala Leu Ser		1040
	1045	1050
Ser Ser Leu Ser Asn Ala Lys Asp Val Ala His Trp Leu Gly Cys Ser		1055
	1060	1065
Ala Thr Ser Thr Phe Asn Phe His Pro Asn Val Arg Pro Val Pro Leu		1070
	1075	1080
Glu Leu His Ile Gln Gly Phe Asn Ile Ser His Thr Gln Thr Arg Leu		1085
	1090	1095
Leu Ser Met Ala Lys Pro Val Tyr His Ala Ile Thr Lys His Ser Pro		1100
1105	1110	1115
Lys Lys Pro Val Ile Val Phe Val Pro Ser Arg Lys Gln Thr Arg Leu		1120
	1125	1130
Thr Ala Ile Asp Ile Leu Thr Thr Cys Ala Ala Asp Ile Gln Arg Gln		1135
	1140	1145
Arg Phe Leu His Cys Thr Glu Lys Asp Leu Ile Pro Tyr Leu Glu Lys		1150
	1155	1160
Leu Ser Asp Ser Thr Leu Lys Glu Thr Leu Leu Asn Gly Val Gly Tyr		1165
	1170	1175
Leu His Glu Gly Leu Ser Pro Met Glu Arg Arg Leu Val Glu Gln Leu		1180
1185	1190	1195
Phe Ser Ser Gly Ala Ile Gln Val Val Val Ala Ser Arg Ser Leu Cys		1200

				1205					1210				1215		
Trp	Gly	Met	Asn	Val	Ala	Ala	His	Leu	Val	Ile	Ile	Met	Asp	Thr	Gln
			1220						1225				1230		
Tyr	Tyr	Asn	Gly	Lys	Ile	His	Ala	Tyr	Val	Asp	Tyr	Pro	Ile	Tyr	Asp
		1235							1240				1245		
Val	Leu	Gln	Met	Val	Gly	His	Ala	Asn	Arg	Pro	Leu	Gln	Asp	Asp	Glu
	1250					1255					1260				
Gly	Arg	Cys	Val	Ile	Met	Cys	Gln	Gly	Ser	Lys	Lys	Asp	Phe	Phe	Lys
1265					1270					1275				1280	
Lys	Phe	Leu	Tyr	Glu	Pro	Leu	Pro	Val	Glu	Ser	His	Leu	Asp	His	Cys
			1285						1290				1295		
Met	His	Asp	His	Phe	Asn	Ala	Glu	Ile	Val	Thr	Lys	Thr	Ile	Glu	Asn
			1300						1305				1310		
Lys	Gln	Asp	Ala	Val	Asp	Tyr	Leu	Thr	Trp	Thr	Phe	Leu	Tyr	Arg	Arg
		1315						1320				1325			
Met	Thr	Gln	Asn	Pro	Asn	Tyr	Tyr	Asn	Leu	Gln	Gly	Ile	Ser	His	Arg
	1330					1335				1340					
His	Leu	Ser	Asp	His	Leu	Ser	Glu	Leu	Val	Glu	Gln	Thr	Leu	Ser	Asp
1345					1350					1355				1360	
Leu	Glu	Gln	Ser	Lys	Cys	Ile	Ser	Ile	Glu	Asp	Glu	Met	Asp	Val	Ala
			1365						1370				1375		
Pro	Leu	Asn	Leu	Gly	Met	Ile	Ala	Ala	Tyr	Tyr	Tyr	Ile	Asn	Tyr	Thr
		1380						1385				1390			
Thr	Ile	Glu	Leu	Phe	Ser	Met	Ser	Leu	Asn	Ala	Lys	Thr	Lys	Val	Arg
	1395							1400				1405			
Gly	Leu	Ile	Glu	Ile	Ile	Ser	Asn	Ala	Ala	Glu	Tyr	Glu	Asn	Ile	Pro
	1410					1415				1420					
Ile	Arg	His	His	Glu	Asp	Asn	Leu	Leu	Arg	Gln	Leu	Ala	Gln	Lys	Val
1425					1430					1435				1440	
Pro	His	Lys	Leu	Asn	Asn	Pro	Lys	Phe	Asn	Asp	Pro	His	Val	Lys	Thr
			1445						1450				1455		
Asn	Leu	Leu	Leu	Gln	Ala	His	Leu	Ser	Arg	Met	Gln	Leu	Ser	Ala	Glu
		1460						1465				1470			
Leu	Gln	Ser	Asp	Thr	Glu	Glu	Ile	Leu	Ser	Lys	Ala	Ile	Arg	Leu	Ile
	1475						1480				1485				
Gln	Ala	Cys	Val	Asp	Val	Leu	Ser	Ser	Asn	Gly	Trp	Leu	Ser	Pro	Ala
	1490					1495				1500					
Leu	Ala	Ala	Met	Glu	Leu	Ala	Gln	Met	Val	Thr	Gln	Ala	Met	Trp	Ser
1505					1510					1515				1520	
Lys	Asp	Ser	Tyr	Leu	Lys	Gln	Leu	Pro	His	Phe	Thr	Ser	Glu	His	Ile
			1525						1530				1535		
Lys	Arg	Cys	Thr	Asp	Lys	Gly	Val	Glu	Ser	Val	Phe	Asp	Ile	Met	Glu
		1540							1545				1550		
Met	Glu	Asp	Glu	Glu	Arg	Asn	Ala	Leu	Leu	Gln	Leu	Thr	Asp	Ser	Gln
	1555						1560					1565			
Ile	Ala	Asp	Val	Ala	Arg	Phe	Cys	Asn	Arg	Tyr	Pro	Asn	Ile	Glu	Leu
	1570					1575				1580					
Ser	Tyr	Glu	Val	Val	Asp	Lys	Asp	Ser	Ile	Arg	Ser	Gly	Gly	Pro	Val
1585					1590					1595				1600	
Val	Val	Leu	Val	Gln	Leu	Glu	Arg	Glu	Glu	Glu	Val	Thr	Gly	Pro	Val
			1605						1610				1615		
Ile	Ala	Pro	Leu	Phe	Pro	Gln	Lys	Arg	Glu	Glu	Gly	Trp	Trp	Val	Val
		1620							1625				1630		
Ile	Gly	Asp	Ala	Lys	Ser	Asn	Ser	Leu	Ile	Ser	Ile	Lys	Arg	Leu	Thr

1635                      1640                      1645  
 Leu Gln Gln Lys Ala Lys Val Lys Leu Asp Phe Val Ala Pro Ala Thr  
 1650                      1655                      1660  
 Gly Ala His Asn Tyr Thr Leu Tyr Phe Met Ser Asp Ala Tyr Met Gly  
 1665                      1670                      1675                      1680  
 Cys Asp Gln Glu Tyr Lys Phe Ser Val Asp Val Lys Glu Ala Glu Thr  
                          1685                      1690                      1695  
 Asp Ser Asp Ser Asp  
                          1700

<210> 2235  
 <211> 586  
 <212> DNA  
 <213> Homo sapiens

<400> 2235  
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 tcagtgtctg cacattctcc actggcagaa tgactcccgga cgtggctcgg gctccccgga  
 120  
 agacaccct cgaagcagtg gtgcctctag catcttcgac ctgaggaacc tggcagctga  
 180  
 ctcatgttg ccctctctgc tagagcgggc ggccccagaa gatgtggacc ggcgcaatga  
 240  
 agcccttcga cggcagcacc ggcccccggc cctgcttccc ctctaccggg cacctgacga  
 300  
 ggatgaagcc ggggaacgct gtagccgct agagccaccc ccgcgagcac tttggacaaa  
 360  
 ggatcttggt caagtgtctg tcgctcaagt tcgagattga aattgagccc atctttggga  
 420  
 tcttggtct gtatgatgtg cggaagaaaa agaagatctc ggaaaacttc tacttcgacc  
 480  
 tgaactcgga ctccatgaag gggctgcttc gggctcatgg caccaccct gccatctcca  
 540  
 ccctggcccg ctctgccatc ttctctgtga cctacccctc acgcgt  
 586

<210> 2236  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

<400> 2236  
 Met Ser Pro Lys Gln Pro Leu His Gly Val Arg Val Gln Val Glu Val  
 1                      5                      10                      15  
 Glu Val Phe Arg Asp Leu Leu Phe Leu Pro His Ile Ile Gln Ser Gln  
                          20                      25                      30  
 Asp Pro Lys Asp Gly Leu Asn Phe Asn Leu Glu Leu Glu Arg Gln Thr  
                          35                      40                      45  
 Leu Asp Gln Asp Pro Leu Ser Lys Val Leu Ala Gly Val Ala Leu Gly  
                          50                      55                      60  
 Gly Tyr Ser Val Pro Arg Leu His Pro Arg Gln Val Pro Gly Arg Gly  
 65                      70                      75                      80  
 Glu Ala Gly Pro Gly Ala Gly Ala Ala Val Glu Gly Leu His Cys Ala

85 90 95  
Gly Pro His Leu Leu Gly Pro Pro Ala Leu Ala Glu Arg Ala Thr Met  
100 105 110  
Ser Gln Leu Pro Gly Ser Ser Gly Arg Arg Cys  
115 120

<210> 2237  
<211> 421  
<212> DNA  
<213> Homo sapiens

<400> 2237  
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tggggcgag gagtgctggc cagcttgggg atagtccctg gaagtggctg ggagcactga  
120  
gggaggagct gaggtccaag cctcctcca gtgcatcacc ctggtcagga gtggggcagt  
180  
gtggagccag gggctcttca gccagcacct gctgcactat gggctccagc tgtgcaagac  
240  
caccctgag aaggagtctt gttgggagca ggggtgggaa gcactgtggg agaggtgtcc  
300  
ttggctcggg tagcagggac cttgatgtat cttgaagcca gggggccgac tgagggcgtt  
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gtctgaaggc ctccatgaga gggagggggc tggagggggc tgttcccaat aatagctcta  
420  
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421

<210> 2238  
<211> 124  
<212> PRT  
<213> Homo sapiens

<400> 2238  
Met Glu Ala Phe Arg Gln Ala Pro Gln Ser Ala Pro Trp Leu Gln Asp  
1 5 10 15  
Thr Ser Arg Ser Leu Leu Pro Glu Pro Arg Thr Pro Leu Pro Gln Cys  
20 25 30  
Phe Pro Thr Leu Leu Pro Thr Arg Leu Leu Leu Thr Gly Gly Leu Ala  
35 40 45  
Gln Leu Glu Pro Ile Val Gln Gln Val Leu Ala Glu Glu Pro Leu Ala  
50 55 60  
Pro His Cys Pro Thr Pro Asp Gln Gly Asp Ala Leu Glu Glu Gly Leu  
65 70 75 80  
Asp Leu Ser Ser Ser Leu Ser Ala Pro Asp His Phe Gln Gly Leu Ser  
85 90 95  
Pro Ser Trp Pro Ala Leu Leu Arg Pro Lys Arg Ser Val Trp Gly Ala  
100 105 110  
Ser Ser Trp Leu Gln Trp Asp Thr Gly Val Pro Ser  
115 120

<210> 2239  
<211> 623



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2239

gctagcagga ctcagaaatc tgctgttgag cacaaagcca aaaaatctct gtcccatcct  
 60  
 agccattcca ggctggggcc catggtcacc ccacacaata aggctaagag tccaggtgtc  
 120  
 aggcagccag gcagcagctc tagctcagcc cctgggcagc ccagcacagg ggttgctcga  
 180  
 cccacagtta gttctggccc tgtgcctagg cgccagaatg gcagctccag ctcaggacct  
 240  
 gagegatcaa tcagtgggtc caagaagcca accaatgact caaatccctc taggcggaca  
 300  
 gtcagtggta catgtggccc tggacaacct gcaagcagct caggtggccc tgggcgaccc  
 360  
 atcagtgggt cagttagttc tgcaagaccc ttgggcagct ctcgtggccc tggccggcct  
 420  
 gtgagcagtc cacatgaact tcgacgacca gtgagtggct tgggcccccc ggggcggctc  
 480  
 gtcagtggcc ctgggagatc cataagtggc ccaattccag ctggacggac tgtcagtaat  
 540  
 tcagtcccag gaagaccagt gagcagcttg ggacctgggc aaacagttag tagctcaggt  
 600  
 cccactataa agcctaagtg cac  
 623

&lt;210&gt; 2240

&lt;211&gt; 207

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2240

Ala	Ser	Arg	Thr	Gln	Lys	Ser	Ala	Val	Glu	His	Lys	Ala	Lys	Lys	Ser
1				5					10					15	
Leu	Ser	His	Pro	Ser	His	Ser	Arg	Pro	Gly	Pro	Met	Val	Thr	Pro	His
			20					25					30		
Asn	Lys	Ala	Lys	Ser	Pro	Gly	Val	Arg	Gln	Pro	Gly	Ser	Ser	Ser	Ser
		35					40					45			
Ser	Ala	Pro	Gly	Gln	Pro	Ser	Thr	Gly	Val	Ala	Arg	Pro	Thr	Val	Ser
		50				55					60				
Ser	Gly	Pro	Val	Pro	Arg	Arg	Gln	Asn	Gly	Ser	Ser	Ser	Ser	Gly	Pro
65					70				75					80	
Glu	Arg	Ser	Ile	Ser	Gly	Ser	Lys	Lys	Pro	Thr	Asn	Asp	Ser	Asn	Pro
			85						90					95	
Ser	Arg	Arg	Thr	Val	Ser	Gly	Thr	Cys	Gly	Pro	Gly	Gln	Pro	Ala	Ser
			100					105					110		
Ser	Ser	Gly	Gly	Pro	Gly	Arg	Pro	Ile	Ser	Gly	Ser	Val	Ser	Ser	Ala
		115				120						125			
Arg	Pro	Leu	Gly	Ser	Ser	Arg	Gly	Pro	Gly	Arg	Pro	Val	Ser	Ser	Pro
		130				135					140				
His	Glu	Leu	Arg	Arg	Pro	Val	Ser	Gly	Leu	Gly	Pro	Pro	Gly	Arg	Ser
145					150				155					160	
Val	Ser	Gly	Pro	Gly	Arg	Ser	Ile	Ser	Gly	Pro	Ile	Pro	Ala	Gly	Arg

1650

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<210> 2243
<211> 384
<212> DNA
<213> Homo sapiens
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<400> 2243
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gattcatttc ctggtaagaa tcttctgact tattgagctg catgtcagaa gcaaaaagca
120
aaaaaaccaa atatgtacat aaaacagtgt tatcattcct taaaagagaa ggaaaataaa
180
tccttaaata atgtggactg gaacacagaa atccaaggct ggccgcacgg gtcttggtg
240
ggatggcatc cggggagctg ctgctgggga cgtgcttgcc ggcacaggtc aggggagccg
300
ggttctgcct cctccttgcc cactctcttt gcgccctccc tgtgctcgcc tgtcttgttt
360
tacctcccat cctgggccct tgga
384
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<210> 2244
<211> 108
<212> PRT
<213> Homo sapiens
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<400> 2244															
Met	Gly	Gly	Lys	Thr	Arg	Gln	Ala	Ser	Thr	Gly	Arg	Ala	Gln	Arg	Glu
1				5					10					15	
Trp	Ala	Arg	Arg	Arg	Gln	Asn	Pro	Ala	Pro	Leu	Thr	Cys	Ala	Gly	Lys
			20					25					30		
His	Val	Pro	Ser	Ser	Ser	Ser	Pro	Asp	Ala	Ile	Pro	Ala	Arg	Thr	Arg
		35					40					45			
Ala	Ala	Ser	Leu	Gly	Phe	Leu	Cys	Ser	Ser	Pro	His	Tyr	Leu	Gly	Ile
	50					55					60				
Tyr	Phe	Pro	Ser	Leu	Leu	Arg	Asn	Asp	Asn	Thr	Val	Leu	Cys	Thr	Tyr
65				70						75				80	
Leu	Val	Phe	Leu	Leu	Phe	Ala	Ser	Asp	Met	Gln	Leu	Asn	Lys	Ser	Glu

85 90 95  
Asp Ser Tyr Gln Glu Met Asn Pro Gln Ser Phe Ser  
100 105

<210> 2245  
<211> 632  
<212> DNA  
<213> Homo sapiens

<400> 2245  
acgcgtgcga ttaccgtcaa ggctgggtgtg gtgagcgctg atctgcacga gcggacgtct  
60  
tcgagagaag aggtcggacg cgagaggctc aactatggtc acaccttggc ccacgctatt  
120  
gagggcccaca agcatttcac gtggcgtcat ggcgaggctg acgcggtggg catggtgttt  
180  
gcggccgaac tgcgcaccg gtacctggga ctgtccgatg aggtcgttgc gcgcacccgc  
240  
actatcctgt ctgagatcgg attgcctgtt acctgtgacg agattaagtg ggcagatctg  
300  
cgcaagacga tgaacgtgga caagaaaacc agggtagacc cgcagaccgg gcgtcaagtg  
360  
ttgcggtttg tcggtattca caaaccgggt caggtcgcca tgatcgtcga ccctgacgag  
420  
gccgctttag ccgagtgcta cgaccgggtg tccgcacggg aaaaacgttc ggaaatgaac  
480  
atgtggctgc gggtcagtcg gcattcaggc ctccgtgacg ccgtcgacce caagtgatgt  
540  
gacgattcgg gaaatatctt gttgggcact cttgagcctc gcctgattcc ccatacccca  
600  
cttaagttca gtatcgacgg catgaatccg ga  
632

<210> 2246  
<211> 153  
<212> PRT  
<213> Homo sapiens

<400> 2246  
Thr Arg Ala Ile Thr Val Lys Ala Gly Val Val Ser Ala Asp Leu His  
1 5 10 15  
Glu Arg Thr Ser Ser Arg Glu Glu Val Gly Arg Glu Arg Leu Asn Tyr  
20 25 30  
Gly His Thr Leu Ala His Ala Ile Glu Ala His Lys His Phe Thr Trp  
35 40 45  
Arg His Gly Glu Ala Asp Ala Val Gly Met Val Phe Ala Ala Glu Leu  
50 55 60  
Ser His Arg Tyr Leu Gly Leu Ser Asp Glu Val Val Ala Arg Thr Arg  
65 70 75 80  
Thr Ile Leu Ser Glu Ile Gly Leu Pro Val Thr Cys Asp Glu Ile Lys  
85 90 95  
Trp Ala Asp Leu Arg Lys Thr Met Asn Val Asp Lys Lys Thr Arg Val  
100 105 110  
Asp Pro Gln Thr Gly Arg Gln Val Leu Arg Phe Val Gly Ile His Lys

115 120 125  
Pro Gly Gln Val Ala Met Ile Val Asp Pro Asp Glu Ala Ala Leu Ala  
130 135 140  
Glu Cys Tyr Asp Arg Cys Ser Ala Arg  
145 150

<210> 2247  
<211> 324  
<212> DNA  
<213> Homo sapiens

<400> 2247  
gggcgttcgc ctccagggtt ctccccgaca ctggatgcca acctgccag gggcagaagg  
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gaggttgggc gtggggagtg ccgggtacag tcagagttgc caggacagtt tggagcagtg  
120  
cctcttaatc ttggccgcac agcacctggg agctttaaat agacccccac gccctgggcg  
180  
ccccaccgc tgaccacccc gatctcagct ctgcctttcc cgcctctctg ctggggttga  
240  
taagccagcg attcccaacc ccggctgtac ctggaagcta cccaggagc ttctggagaa  
300  
tgtgccgtgt gagccatccc cctg  
324

<210> 2248  
<211> 105  
<212> PRT  
<213> Homo sapiens

<400> 2248  
Met Ala His Thr Ala His Ser Pro Glu Ala Pro Gly Val Ala Ser Arg  
1 5 10 15  
Tyr Ser Arg Gly Trp Glu Ser Leu Ala Tyr Ala Thr Gln Gln Arg Gly  
20 25 30  
Gly Lys Gly Arg Ala Glu Ile Gly Trp Val Ser Gly Gly Gly Ala Gln  
35 40 45  
Gly Val Gly Val Tyr Leu Lys Leu Pro Gly Ala Val Arg Pro Arg Leu  
50 55 60  
Arg Gly Thr Ala Pro Asn Cys Pro Gly Asn Ser Asp Cys Thr Arg His  
65 70 75 80  
Ser Pro Arg Pro Thr Ser Leu Leu Pro Leu Gly Arg Leu Ala Ser Ser  
85 90 95  
Val Gly Glu Asn Pro Gly Gly Glu Arg  
100 105

<210> 2249  
<211> 394  
<212> DNA  
<213> Homo sapiens

<400> 2249  
gaaaaccgga taacagggtg tatacaagcc tctgagttct gggagcaaca accagctcaa  
60

cccgaagg aaagtgagaa agcaattaag ttgggaaccg cggggttttc ccattcccac  
120  
gggtggaaacc gcggccagtg aattgaaatc cgcttcctta aggcgaaatg ggcccttaaa  
180  
aggcaaggtc aaccgcccgc cagtgtgatg gaatttgcaa gaattcgggt tagcacctc  
240  
ccggcttttc tcccgaccgc gtgcaggggtg ggctgcgctg ggctggggag gaactgggag  
300  
ctgggggctc atgtcctgta taaaggggct gcagggggcg tgtctcccc cagaagactg  
360  
gccacatggg gacaggcctc ctgggggcag atct  
394

<210> 2250  
<211> 104  
<212> PRT  
<213> Homo sapiens

<400> 2250  
Met Ser Pro Gln Leu Pro Val Pro Pro Arg Pro Ser Ala Ala His Pro  
1 5 10 15  
Ala Arg Gly Arg Glu Lys Ser Arg Glu Gly Ala Lys Pro Asn Ser Cys  
20 25 30  
Lys Phe His His Thr Gly Gly Arg Leu Thr Leu Pro Phe Lys Gly Pro  
35 40 45  
Phe Arg Leu Lys Glu Ala Asp Phe Asn Ser Leu Ala Ala Val Ser Thr  
50 55 60  
Val Gly Met Gly Lys Pro Arg Gly Ser Gln Leu Asn Cys Phe Leu Thr  
65 70 75 80  
Phe Pro Cys Gly Leu Ser Trp Leu Leu Leu Pro Glu Leu Arg Gly Leu  
85 90 95  
Tyr Thr Pro Cys Tyr Pro Val Phe  
100

<210> 2251  
<211> 654  
<212> DNA  
<213> Homo sapiens

<400> 2251  
acgcgtactt attcgccacc atgattatga ccagtgtttc cagtccgttc agttgttgca  
60  
gtggaatagt cagggttaaat ttaatgtgac cgtttatcgc aatctgccga ccactcgcca  
120  
ttcaatcatg acttcgtgat aaaagattga gtgtgagggt ataacgccga agcggtaaaa  
180  
attttaattt ttgccgctga ggggttgacc aagcgaagcg cggtaggttt tctgcttagg  
240  
agttaaatca tgtttcagac ttttatttct cgccataatt caaacttttt ttctgataag  
300  
ctggtttctca cttctgttac tccagcttct tcggcacctg ttttacagac acctaaagct  
360  
acatcgtaa cgttatatat tgatagtttg acgggttaatg ctggtaatgg tggttttctt  
420

cattgcattc agatggatac atctgtcaac gccgctaac aggttggttc tgttggtgct  
480  
gatattgctt ttgatgccga ccctaaattt tttgcctggt tggttcgctt tgagtcttct  
540  
tcggttccga ctaccctccc gactgcctat gatgtttatc ctttggatgg tcgccatgat  
600  
ggtggttatt ataccgtcaa ggactgtgtg actattgacg tccttctcgc tacg  
654

<210> 2252  
<211> 135  
<212> PRT  
<213> Homo sapiens

<400> 2252  
Met Phe Gln Thr Phe Ile Ser Arg His Asn Ser Asn Phe Phe Ser Asp  
1 5 10 15  
Lys Leu Val Leu Thr Ser Val Thr Pro Ala Ser Ser Ala Pro Val Leu  
20 25 30  
Gln Thr Pro Lys Ala Thr Ser Ser Thr Leu Tyr Phe Asp Ser Leu Thr  
35 40 45  
Val Asn Ala Gly Asn Gly Gly Phe Leu His Cys Ile Gln Met Asp Thr  
50 55 60  
Ser Val Asn Ala Ala Asn Gln Val Val Ser Val Gly Ala Asp Ile Ala  
65 70 75 80  
Phe Asp Ala Asp Pro Lys Phe Phe Ala Cys Leu Val Arg Phe Glu Ser  
85 90 95  
Ser Ser Val Pro Thr Thr Leu Pro Thr Ala Tyr Asp Val Tyr Pro Leu  
100 105 110  
Asp Gly Arg His Asp Gly Gly Tyr Tyr Thr Val Lys Asp Cys Val Thr  
115 120 125  
Ile Asp Val Leu Pro Arg Thr  
130 135

<210> 2253  
<211> 327  
<212> DNA  
<213> Homo sapiens

<400> 2253  
ggatcctgct gggcctcttt tacgtgatgt tgaccagcc gctggtgcgc attattcgcg  
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cactgagcac cagcaagcag gcccgcttgg attgccacc gggtcacgaa aacgatgaaa  
120  
tcggcgtatt ggtcaacgtc gcccaaccagc aattcgacaa tatggaaacc gaaatcgagc  
180  
agcgccgcca cgccgaggac cgctcaccg aatacctggg ccaactggaa gatatcgtct  
240  
ccgcacgcac cctggagctc aaggccagca accaacgctt gagccaatcc aacgatgagc  
300  
tggaagcggc aaagttgacc gccttgg  
327

<210> 2254

<211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 2254  
 Met Leu Thr Gln Pro Leu Val Arg Ile Ile Arg Ala Leu Ser Thr Ser  
 1 5 10 15  
 Lys Gln Ala Arg Leu Asp Cys Pro Pro Gly His Glu Asn Asp Glu Ile  
 20 25 30  
 Gly Val Leu Val Asn Val Ala Asn Gln Gln Phe Asp Asn Met Glu Thr  
 35 40 45  
 Glu Ile Glu Gln Arg Arg His Ala Glu Asp Arg Leu Thr Glu Tyr Leu  
 50 55 60  
 Gly Gln Leu Glu Asp Ile Val Ser Ala Arg Thr Leu Glu Leu Lys Ala  
 65 70 75 80  
 Ser Asn Gln Arg Leu Ser Gln Ser Asn Asp Glu Leu Glu Ala Ala Lys  
 85 90 95  
 Leu Thr Ala Leu  
 100

<210> 2255  
 <211> 357  
 <212> DNA  
 <213> Homo sapiens

<400> 2255  
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 aatatggctc atgcaacttc tggccaaagg ggtcacattg agcgtgctgc tatcaatgct  
 120  
 cctgtacagg gcagtgcagc tgatgttgct atgtgtgcaa tgcttgagat agacaggaat  
 180  
 actcgtctta aggagcttgg ttggacgcta ctcttgagg tgcatgatga agtgatactg  
 240  
 gaagggcctt cagagtctgc ggagtnggcc aagtccatag ttgttgagt catgtctaag  
 300  
 cccttctatg gcaccaatat cctgaggggc gaccttgctg ttgatgcaa gtgtgca  
 357

<210> 2256  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 2256  
 Xaa Leu Ala His Glu Lys Cys Glu Val Tyr Thr Leu Leu Gly Arg Ser  
 1 5 10 15  
 Arg Arg Phe Pro Asn Met Ala His Ala Thr Ser Gly Gln Arg Gly His  
 20 25 30  
 Ile Glu Arg Ala Ala Ile Asn Ala Pro Val Gln Gly Ser Ala Ala Asp  
 35 40 45  
 Val Ala Met Cys Ala Met Leu Glu Ile Asp Arg Asn Thr Arg Leu Lys  
 50 55 60  
 Glu Leu Gly Trp Thr Leu Leu Leu Gln Val His Asp Glu Val Ile Leu



65		70		75		80
Glu Gly Pro Ser	Glu Ser Ala Glu Xaa Ala Lys Ser Ile Val Val Glu					
	85		90		95	
Cys Met Ser Lys Pro Phe Tyr Gly Thr Asn Ile Leu Arg Val Asp Leu						
	100		105		110	
Ala Val Asp Ala Lys Cys Ala						
	115					

&lt;210&gt; 2257

&lt;211&gt; 626

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2257

nnaatgacaa aaaatatgaa ccaaaatagt gacagtggca gtacaaataa ctataaaagc  
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ctgaaacctt aattagaaaa tctgagttct ttaccaccag attctgacag aacatcagaa  
120  
gtatatctac atgaagaatt acagcaggac atgcaaaagt ttaagaatga ggtcaacaca  
180  
ttagaagaag agttcctggc tttgaagaaa gaaaatgttc aacttcataa agagggtgaa  
240  
gaagaaatgg agaagcacag aagtaatagc acagaattat caggaaccct aactgatggt  
300  
actactgttg gcaatgatga tgatggacta aatcagcaga ttcttaggaa ggaaaatgaa  
360  
gagcatgaca ggctgcaga taaaacagct aatgaaaaga acaagggtcaa aaaccaaata  
420  
tattctgagg ctgactttgc tgactcaatg gagccatctg aaatagcctc agaggattgt  
480  
gaattgtctc actctgttta tgagaatttt atgttgctga ttgaacaact tagaatggag  
540  
tataaaggta ggaccactgc ataaatgcaa ggccctttga tgtatcctgc agtaatgtgt  
600  
gtatacattg ctgagaactg acgcgt  
626

&lt;210&gt; 2258

&lt;211&gt; 187

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2258

Xaa Met Thr Lys Asn Met Asn Gln Asn Ser Asp Ser Gly Ser Thr Asn	
1	15
Asn Tyr Lys Ser Leu Lys Pro Lys Leu Glu Asn Leu Ser Ser Leu Pro	
20	30
Pro Asp Ser Asp Arg Thr Ser Glu Val Tyr Leu His Glu Glu Leu Gln	
35	45
Gln Asp Met Gln Lys Phe Lys Asn Glu Val Asn Thr Leu Glu Glu Glu	
50	60
Phe Leu Ala Leu Lys Lys Glu Asn Val Gln Leu His Lys Glu Val Glu	
65	80
Glu Glu Met Glu Lys His Arg Ser Asn Ser Thr Glu Leu Ser Gly Thr	

				85					90					95					
Leu	Thr	Asp	Gly	Thr	Thr	Val	Gly	Asn	Asp	Asp	Asp	Gly	Leu	Asn	Gln				
			100					105					110						
Gln	Ile	Pro	Arg	Lys	Glu	Asn	Glu	Glu	His	Asp	Arg	Pro	Ala	Asp	Lys				
		115					120					125							
Thr	Ala	Asn	Glu	Lys	Asn	Lys	Val	Lys	Asn	Gln	Ile	Tyr	Pro	Glu	Ala				
	130					135				140									
Asp	Phe	Ala	Asp	Ser	Met	Glu	Pro	Ser	Glu	Ile	Ala	Ser	Glu	Asp	Cys				
145					150				155				160						
Glu	Leu	Ser	His	Ser	Val	Tyr	Glu	Asn	Phe	Met	Leu	Leu	Ile	Glu	Gln				
			165					170					175						
Leu	Arg	Met	Glu	Tyr	Lys	Gly	Arg	Thr	Thr	Ala									
		180						185											

&lt;210&gt; 2259

&lt;211&gt; 425

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2259

```

acgcgtcaca atgataaagc cattatatcc atcaagaggt aaatcattct tgaaattttc
60
taaaggtaaa cacttacgtg taacacgttc atcaaagaat tcaggaacca catattctgg
120
acgggtcatct acgactgtaa cagcacagcc aataaacaat agcaaatacag taatagctcg
180
gctaacatga cctgcaccta atacgagaac tgacggatca ttttctacag gttgtacgaa
240
acactccatt tcgcctacca tgcatagaga attcagcttt gctttatcta cagtaaatacc
300
ttcaatagga gttccgtata gaacccttcc atcttcagca taaatagtct tatccccttg
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420
catga
425

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&lt;210&gt; 2260

&lt;211&gt; 141

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2260

Met	Lys	Asn	Arg	Leu	Gln	Val	Thr	Glu	Ala	Thr	Val	Met	Val	Thr	Val				
1				5				10				15							
Leu	Ser	Gly	Pro	Arg	Gln	Gly	Asp	Lys	Thr	Ile	Tyr	Ala	Glu	Asp	Gly				
		20					25					30							
Arg	Val	Leu	Tyr	Gly	Thr	Pro	Ile	Glu	Gly	Phe	Thr	Val	Asp	Lys	Ala				
	35					40				45									
Lys	Leu	Asn	Ser	Leu	Cys	Met	Val	Gly	Glu	Met	Glu	Cys	Phe	Val	Gln				
50				55				60											
Pro	Val	Glu	Asn	Asp	Pro	Ser	Val	Leu	Val	Leu	Gly	Ala	Gly	His	Val				
65			70					75					80						
Ser	Arg	Ala	Ile	Thr	Asp	Leu	Leu	Leu	Phe	Ile	Gly	Cys	Arg	Val	Thr				

				85						90					95				
Val	Val	Asp	Asp	Arg	Pro	Glu	Tyr	Val	Val	Pro	Glu	Phe	Phe	Asp	Glu				
				100						105					110				
Arg	Val	Thr	Arg	Lys	Cys	Leu	Pro	Leu	Glu	Asn	Phe	Lys	Asn	Asp	Leu				
				115						120					125				
Pro	Leu	Asp	Glu	Tyr	Asn	Gly	Phe	Ile	Ile	Val	Thr	Arg							
				130						135					140				

<210> 2261  
 <211> 660  
 <212> DNA  
 <213> Homo sapiens

<400> 2261  
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 120  
 tgtcggtgca cgctgaccga gaggtccgtg cggagagtac tcccgatgat atttgccggc  
 180  
 agctcgatgc cgtggccgcc atgatggccc ttgtctatgg gtcgaatgtg actattcccg  
 240  
 acgatgccgg gaggtcttcc gacaagcttc actgaacggt gttcaattgg tcccaacggc  
 300  
 tgcccatgtg ggcagccgct ctatctcgtc atgggaagga acccgatgtc gtcacgcaat  
 360  
 ggtttccagg ccaccgacct ggctcttacc gcgggtctttg cagccctcat tgctgtgcta  
 420  
 gccgtcatcc cgccgatgtt catgggtgggg gcgggtccctt ttgcccttca gatgggttgc  
 480  
 gtcattgctg cgccgatggt gctgggaagt atccgtggcg gatgcgcggt aggcttgtat  
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 660

<210> 2262  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 2262  
 Met Pro Gly Gly Ser Ser Thr Ser Phe Thr Glu Arg Cys Ser Ile Gly  
 1 5 10 15  
 Pro Asn Gly Cys Pro Cys Gly Gln Pro Leu Tyr Leu Val Met Gly Arg  
 20 25 30  
 Asn Pro Met Ser Ser Arg Asn Gly Phe Gln Ala Thr Asp Leu Ala Leu  
 35 40 45  
 Ile Ala Val Phe Ala Ala Leu Ile Ala Val Leu Ala Val Ile Pro Pro  
 50 55 60  
 Met Phe Met Val Gly Ala Val Pro Phe Ala Leu Gln Met Val Ala Val  
 65 70 75 80  
 Met Leu Ala Pro Met Val Leu Gly Ser Ile Arg Gly Gly Cys Ala Val

				85					90					95					
Gly	Leu	Tyr	Ile	Leu	Val	Gly	Ala	Leu	Gly	Leu	Pro	Val	Phe	Ser	Gly				
				100					105					110					
Gly	Ser	Ser	Gly	Ile	Gly	Val	Leu	Val	Gly	Pro	Thr	Gly	Gly	Tyr	Leu				
			115				120						125						
Trp	Gly	Trp	Leu	Ile	Gly	Ala	Phe	Val	Ala	Gly									
			130				135												

<210> 2263  
 <211> 491  
 <212> DNA  
 <213> Homo sapiens

<400> 2263  
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 tcccaccgcg gtatggctgg gtcactgctg acagatggcg tccccctgct gatctttccg  
 120  
 gagggcaccc ggtctcgcac cggcgcaatg ggcaccttca aacctggggc tgccgcattg  
 180  
 gctatttcac gtgggggttcc gggtatcccg attgcttttag taggagcatg ggcggtatg  
 240  
 ccgtccgagc aagccaggtt accaaaagga cgtccattgg tccacgtggc tattggacac  
 300  
 cctatggacc ctgttcccg cgagatcgcc caccaattct ccgaacggat tcgtcgccag  
 360  
 gtcattgagt tgcacgacca aaccgcccgc gcctacggca tgccaaccct tgacgaatac  
 420  
 ggacgccacc gcgcgctaag ccaggcctcc gagagcggcg acaccgcac caccaaccac  
 480  
 tcgacgtgca c  
 491

<210> 2264  
 <211> 163  
 <212> PRT  
 <213> Homo sapiens

<400> 2264  
 Xaa Ala Phe Pro Val Asp Arg Gly Lys Gly Lys Ser Lys Gln Gly Ala  
 1 5 10 15  
 Arg Ser Pro Arg Ser His Arg Gly Met Ala Gly Ser Leu Leu Thr Asp  
 20 25 30  
 Gly Val Pro Leu Leu Ile Phe Pro Glu Gly Thr Arg Ser Arg Thr Gly  
 35 40 45  
 Ala Met Gly Thr Phe Lys Pro Gly Ala Ala Ala Leu Ala Ile Ser Arg  
 50 55 60  
 Gly Val Pro Val Ile Pro Ile Ala Leu Val Gly Ala Trp Ala Ala Met  
 65 70 75 80  
 Pro Ser Glu Gln Ala Arg Leu Pro Lys Gly Arg Pro Leu Val His Val  
 85 90 95  
 Ala Ile Gly His Pro Met Asp Pro Val Pro Gly Glu Ile Ala His Gln  
 100 105 110  
 Phe Ser Glu Arg Ile Arg Arg Gln Val Ile Glu Leu His Asp Gln Thr

	115		120		125	
Ala	Arg	Ala	Tyr	Gly	Met	Pro
						Thr
						Leu
						Asp
						Glu
						Tyr
						Gly
						Arg
						His
						Arg
	130		135		140	
Ala	Leu	Ser	Gln	Ala	Ser	Glu
						Ser
						Gly
						Asp
						Thr
						Ala
						Ser
						Thr
						Asn
						His
145			150		155	
						160
Ser	Thr	Cys				

<210> 2265  
 <211> 328  
 <212> DNA  
 <213> Homo sapiens

<400> 2265  
 ccatggggaat aggcccaacac ggatggatct actgtataac ttgcctgccca tcaggaaaga  
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 gtcaacacgg cagacacatg ctggcagaaa ccctgctgga gttgccctg agcattgatg  
 120  
 cataccaccc gagaggagga gaggggtggtg ggagaaatca gatcagagtt caaaatgcac  
 180  
 cggaagggct cggaaatgta agactgcacc ttgcaggaac tgtcaatgcc actaccaata  
 240  
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 300  
 tttagcacgt gactgggacc actggaca  
 328

<210> 2266  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 2266  
 Met Gly Ile Gly Gln His Gly Trp Ile Tyr Cys Ile Thr Cys Leu Pro  
 1 5 10 15  
 Ser Gly Lys Ser Gln His Gly Arg His Met Leu Ala Glu Thr Leu Leu  
 20 25 30  
 Glu Leu Pro Leu Ser Ile Asp Ala Tyr His Pro Arg Gly Gly Glu Gly  
 35 40 45  
 Gly Gly Arg Asn Gln Ile Arg Val Gln Asn Ala Pro Glu Gly Leu Gly  
 50 55 60  
 Asn Val Arg Leu His Leu Ala Gly Thr Val Asn Ala Thr Thr Asn Ile  
 65 70 75 80  
 Thr His Leu Arg Gln Ala Leu Glu Ser Ser Cys Glu His Asn Ser Leu  
 85 90 95  
 Thr Pro Asn Leu  
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<210> 2267  
 <211> 370  
 <212> DNA  
 <213> Homo sapiens

<400> 2267

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agaccatgga gggctaatagc aggctgggaa ggctaggcag agttcccaga aacagggtcac  
120  
cgagggagcc accactgaat tgcactctcg ctggggagtt aagccatata cccctaagac  
180  
agcagtgacc ggagtggcca atctgtacag ggacaggctc aaggccacag caactcaggg  
240  
gacagagatg gtgaagcagg catgtcctaa agcctccctt cttaacctg accttgaagg  
300  
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360  
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370

<210> 2268  
<211> 91  
<212> PRT  
<213> Homo sapiens

<400> 2268  
Met Ala Asp His Gly Gly Leu Met Gln Ala Gly Lys Ala Arg Gln Ser  
1 5 10 15  
Ser Gln Lys Gln Val Thr Glu Gly Ala Thr Thr Glu Leu His Ser Arg  
20 25 30  
Trp Gly Val Lys Pro Tyr Pro Pro Lys Thr Ala Val Thr Gly Val Ala  
35 40 45  
Asn Leu Tyr Arg Asp Arg Leu Lys Ala Thr Ala Thr Gln Gly Thr Glu  
50 55 60  
Met Val Lys Gln Ala Cys Pro Lys Ala Ser Leu Leu Asn Pro Asp Leu  
65 70 75 80  
Glu Gly Gln Glu Thr Ser His Leu Arg Met Leu  
85 90

<210> 2269  
<211> 507  
<212> DNA  
<213> Homo sapiens

<400> 2269  
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tgtaaggctg ccaccgagca cggtagcagc atccgaatcg gcgtgaatgc tgggtctctc  
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gacaaacgtc tgcttgacaa atacggagcc ccgaccgccg aggctatggt ggagtcggca  
180  
ctgtgggagg ccagcctctt tgagcaatac ggattccggg atttcaaaat ctcggtgaag  
240  
caccacgacc cggtcgtcat gatccgtgcc tatgaacagc tcgccgccaa atgcgattat  
300  
ccccttcatt tgggcgttac tgaggctggg ccggccttcc aaggcaccat caagtcggcg  
360  
gtggccttcg ggcattctct tgccgagggt atcggcgata ccatacgcgt ctccttgctg  
420

gctgatccgg tcgaggaagt caaggtgggt atcaagatcc tggagtcgct caacctacgt  
480  
cctcgaggtc tagagatcgt ctcctgc  
507

<210> 2270  
<211> 169  
<212> PRT  
<213> Homo sapiens

<400> 2270  
Leu Ser Asp Arg Val Asn Pro Gly Asn Ile Arg Lys Phe Asp Asp Gln  
1 5 10 15  
Ile Glu Ser Ile Cys Lys Ala Ala Thr Glu His Gly Thr Ser Ile Arg  
20 25 30  
Ile Gly Val Asn Ala Gly Ser Leu Asp Lys Arg Leu Leu Asp Lys Tyr  
35 40 45  
Gly Ala Pro Thr Ala Glu Ala Met Val Glu Ser Ala Leu Trp Glu Ala  
50 55 60  
Ser Leu Phe Glu Gln Tyr Gly Phe Arg Asp Phe Lys Ile Ser Val Lys  
65 70 75 80  
His His Asp Pro Val Val Met Ile Arg Ala Tyr Glu Gln Leu Ala Ala  
85 90 95  
Lys Cys Asp Tyr Pro Leu His Leu Gly Val Thr Glu Ala Gly Pro Ala  
100 105 110  
Phe Gln Gly Thr Ile Lys Ser Ala Val Ala Phe Gly His Leu Leu Ala  
115 120 125  
Glu Gly Ile Gly Asp Thr Ile Arg Val Ser Leu Ser Ala Asp Pro Val  
130 135 140  
Glu Glu Val Lys Val Gly Ile Lys Ile Leu Glu Ser Leu Asn Leu Arg  
145 150 155 160  
Pro Arg Gly Leu Glu Ile Val Ser Cys  
165

<210> 2271  
<211> 573  
<212> DNA  
<213> Homo sapiens

<400> 2271  
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ccgatggctg acgaaagcct ggaacagttc gccagttgc tcaaaaccg cacctcggaa  
120  
gaaggcatgg cgccgttgac ctccgacgcg gtggcgcggt tggccactta cagcgcacgg  
180  
ctggcggaacc accaagggcg tgtgtccgcg cgcattggcg acttggtcca actggtcagc  
240  
gaggcggaact ttatccgcca cctggcgggc gacgagatga ctgatgccgg ccatatcgaa  
300  
cgggcgctca aggccaaggc cacgcgtacc gggcggtgat cggcgcgat tctcgacgac  
360  
atgctcgtcg gggtcacct gatcgacacc gccggcgcg cctggggcaa atgcaacggg  
420

ctgacggtgc tggaagtcgg cgattcggcg ttcggcgtgc cggcgcgat ttccgccacg  
480  
gtgtaccggc gcggcagcgg cattgtcgac atcgagcgcg aagttaacct cggccagccg  
540  
atccactcca agggcgtgat gacccctacc ggt  
573

<210> 2272  
<211> 191  
<212> PRT  
<213> Homo sapiens

<400> 2272  
Xaa Ala Asp Pro Asp Phe Gln Glu Met Leu Arg Ala Leu Val Asp Phe  
1 5 10 15  
Asp Glu Asp Ile Pro Met Val Asp Glu Ser Leu Glu Gln Phe Ala Gln  
20 25 30  
Leu Leu Lys Thr Arg Thr Ser Glu Glu Gly Met Ala Pro Leu Thr Ser  
35 40 45  
Asp Ala Val Ala Arg Leu Ala Thr Tyr Ser Ala Arg Leu Ala Asp His  
50 55 60  
Gln Gly Arg Val Ser Ala Arg Ile Gly Asp Leu Phe Gln Leu Val Ser  
65 70 75 80  
Glu Ala Asp Phe Ile Arg His Leu Ala Gly Asp Glu Met Thr Asp Ala  
85 90 95  
Gly His Ile Glu Arg Ala Leu Lys Ala Lys Ala Thr Arg Thr Gly Arg  
100 105 110  
Val Ser Ala Arg Ile Leu Asp Asp Met Leu Ala Gly Val Ile Leu Ile  
115 120 125  
Asp Thr Ala Gly Ala Ala Val Gly Lys Cys Asn Gly Leu Thr Val Leu  
130 135 140  
Glu Val Gly Asp Ser Ala Phe Gly Val Pro Ala Arg Ile Ser Ala Thr  
145 150 155 160  
Val Tyr Pro Gly Gly Ser Gly Ile Val Asp Ile Glu Arg Glu Val Asn  
165 170 175  
Leu Gly Gln Pro Ile His Ser Lys Gly Val Met Ile Leu Thr Gly  
180 185 190

<210> 2273  
<211> 4355  
<212> DNA  
<213> Homo sapiens

<400> 2273  
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120  
gagagggagg aggaagtgat cacctgtttt gagagggcct cctggatcgc tcaggtgttc  
180  
ctgcaggaat tggagaagac cacaataaac agcacgtcga ggcatctgaa aggctgtcac  
240  
ccgcttgact atgagctcac ctacttcctg gaagctgcc cccagagcgc ctatgtgaaa  
300



aacctgaaga aggggaacat cgtgaagggc atgagagagc tccgggaggt gctgcggact  
360  
gtggagacca aagcaactca gaacttcaaa gtgatggcgg ccaagcacct ggcgggggtc  
420  
ctgctgcact ccctgagtgg agtgctactg gagccccctg tcccaccctc tgcctgagtt  
480  
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ggagacaacc tctactgccc caaggacaac atcgaggaag ccctcctgct cctcctcatc  
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780  
ggagaatttc acctttggtc ccaggtggcc ctctccatgg tggcttgtgg gaagtcagcc  
840  
tacgctgtgt ccctgctgcg ggagtgtgtg aagttgcggc cctcggaccc caccgtgccc  
900  
ctgatggccg cgaaggtctg catcgggtcc ctctcgtggc tagaggaagc agagcacttt  
960  
gccatgatgg tgatcagcct cggagaggaa gccggggagt tcctcccaa gggctacctg  
1020  
gctctgggtc tcacctatag cctgcaggcc accgacgcca ccctgaagtc caagcaagat  
1080  
gaattgcacc ggaaggcact gcagacgctg gagagggctc agcagctggc gccagtgac  
1140  
ccccaggtca tcctctatgt ctctgctcag ctggccctcg tccgacagat ctccagtgcc  
1200  
atggagcagc tgcaggaggc cctgaaggta cgcaaggatg atgccacgc cctccacctg  
1260  
ctggcactgc tcttctctgc ccagaagcac caccagcatg ccctggatgt tgtcaacatg  
1320  
gccatcaccg agcacctga gaacttcaac ctgatgttca ccaaggtgaa gctggagcag  
1380  
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1440  
accctgtaca gcttctccca gctgggaggg ctagaaaagg atggcagctt cggtgagggc  
1500  
ctcaccatga agaagcagag tggcatgcac ctgactttgc ctgatgcca tgatgcagac  
1560  
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&lt;210&gt; 2274

&lt;211&gt; 158

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2274

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Ile	Ala	Ser	Arg	Phe	Arg	Leu	Thr	Glu	Arg	Glu	Glu	Glu	Val	Ile	Thr
			35				40						45		
Cys	Phe	Glu	Arg	Ala	Ser	Trp	Ile	Ala	Gln	Val	Phe	Leu	Gln	Glu	Leu
			50			55					60				
Glu	Lys	Thr	Thr	Asn	Asn	Ser	Thr	Ser	Arg	His	Leu	Lys	Gly	Cys	His
65					70				75					80	
Pro	Leu	Asp	Tyr	Glu	Leu	Thr	Tyr	Phe	Leu	Glu	Ala	Ala	Leu	Gln	Ser
			85					90					95		
Ala	Tyr	Val	Lys	Asn	Leu	Lys	Lys	Gly	Asn	Ile	Val	Lys	Gly	Met	Arg
			100					105					110		
Glu	Leu	Arg	Glu	Val	Leu	Arg	Thr	Val	Glu	Thr	Lys	Ala	Thr	Gln	Asn
			115				120					125			
Phe	Lys	Val	Met	Ala	Ala	Lys	His	Leu	Ala	Gly	Val	Leu	Leu	His	Ser
			130				135					140			
Leu	Ser	Gly	Val	Leu	Leu	Glu	Pro	Pro	Val	Pro	Pro	Ser	Ala		

145

150

155

&lt;210&gt; 2275

&lt;211&gt; 608

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2275

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480  
ccattcttga gcagcagtgc tactctaata ccagttccca tctccctcc ctttactcag  
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600  
aagctgcg  
608

&lt;210&gt; 2276

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2276

Ser Thr Asn Asn Thr Lys Glu Asn Arg Arg Pro Gln Lys Glu Glu Pro  
1 5 10 15  
Gly Cys Ala Pro Thr Phe Phe Pro Asn Gln Ser Ser Gly Phe Thr Thr  
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Pro Thr Ala Met Thr Pro Pro Val Leu Thr Thr Ala Glu Thr Ser Val  
35 40 45  
Lys Pro Ser Val Ser Ala Phe Thr His Ser Pro Pro Glu Asn Thr Thr  
50 55 60  
Gly Ile Ser Ser Thr Ile Ser Phe His Ser Arg Thr Leu Asn Leu Thr  
65 70 75 80  
Asp Val Ile Glu Glu Leu Ala Gln Ala Ser Thr Gln Thr Leu Lys Ser  
85 90 95  
Thr Ile Ala Ser Glu Thr Thr Leu Ser Ser Lys Ser His Gln Ser Thr  
100 105 110  
Thr Thr Arg Lys Ala Ile Ile Arg His Ser Thr Ile Pro Pro Phe Leu  
115 120 125  
Ser Ser Ser Ala Thr Leu Ile Pro Val Pro Ile Ser Pro Pro Phe Thr

1668

130 135 140  
Gln Arg Ala Val Thr Asp Asn Val Ala Thr Pro Ile Ser Gly Leu Met  
145 150 155 160  
Thr Asn Thr Val Val Lys Leu  
165

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<211> 640  
<212> DNA  
<213> Homo sapiens

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<213> Homo sapiens

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35 40 45  
Ser Leu Leu Ser Pro Tyr Pro Val Leu Pro Ser Pro Ser Cys Lys Val  
50 55 60  
His Ala Thr Pro Gln Glu Glu Pro Gln Arg Leu Ser Ser Asp Pro Thr  
65 70 75 80  
Leu Ser Ala Pro Thr Leu Pro Pro His Gln Ile Leu Ser Thr Pro  
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<212> DNA  
<213> Homo sapiens

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331

<210> 2280  
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<400> 2280  
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Glu Cys Met Glu Ser Glu Gly Thr Gly Pro Thr His Ser Pro Ser Ser  
35 40 45  
Pro Ala Val Leu Phe Ser Phe Leu His Cys Ala Phe Val Ser Phe Leu  
50 55 60  
Gly Thr Ser Phe Thr Pro Ala Cys Ile Ser Ser Leu Ser His Gly Ser  
65 70 75 80  
Pro Leu Ser Trp Ser Ser Gly Ala Val Pro Ile  
85 90

<210> 2281  
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<212> DNA  
<213> Homo sapiens

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240  
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300

gcctgacttg tggatagatg ctaagaagcc cttcagtttg aaagcagatg gtgagaatcc  
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<210> 2282  
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 <212> PRT  
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<400> 2282  
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 20 25 30  
 Pro Ser Glu Asp Ser Arg Gly Thr Phe Val Pro Asp Ile Leu His Gly  
 35 40 45  
 Asn Phe Gln Glu Gly Gly Gln Leu Ala Ser Ala Ala Pro Asp Leu Trp  
 50 55 60  
 Ile Asp Ala Lys Lys Pro Phe Ser Leu Lys Ala Asp Gly Glu Asn Pro  
 65 70 75 80  
 Asp Ile Leu Thr His Cys Glu His Asp Tyr Gly Glu Thr Thr Thr Arg  
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<210> 2283  
 <211> 404  
 <212> DNA  
 <213> Homo sapiens

<400> 2283  
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 240  
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 300  
 cgacttccag ctaaagcgca ggcgtcccat gccacttctt ctccgaagat gcgtaaagtt  
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<210> 2284  
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 Ser Lys Phe Arg Arg Lys Phe Ile Val Lys Tyr Ser Ala Thr Ser Phe  
 35 40 45  
 Leu Leu Cys His Leu Gly Gly Gly Cys Asn Phe Pro His His Cys Arg  
 50 55 60  
 Val Leu Arg Asn Arg Leu Gln Pro Cys His Arg Ser Ser Gln Leu His  
 65 70 75 80  
 Gln Ala Phe Gly Arg Ala Val Ile Arg Leu Pro Ala Lys Ala Gln Ala  
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 Ser His Ala Thr Ser Ser Pro Lys Met Arg Lys Val Arg Thr Arg Lys  
 100 105 110  
 Gln Gly Ala Val Glu Arg Ser Ser Ala Pro  
 115 120

&lt;210&gt; 2285

&lt;211&gt; 6505

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2285

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&lt;210&gt; 2286

&lt;211&gt; 1784

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2286

Pro	Val	Pro	Ala	Met	Pro	Gly	Gly	Pro	Ser	Pro	Arg	Ser	Pro	Ala	Pro
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			20					25					30		
Pro	Gly	Pro	Ala	Pro	Gly	Arg	Ala	Thr	Glu	Gly	Arg	Ala	Ala	Leu	Asp
		35				40					45				
Ile	Val	His	Pro	Val	Arg	Val	Asp	Ala	Gly	Gly	Ser	Phe	Leu	Ser	Tyr
	50				55						60				
Glu	Leu	Trp	Pro	Arg	Ala	Leu	Arg	Lys	Arg	Asp	Val	Ser	Val	Arg	Arg
65					70					75				80	
Asp	Ala	Pro	Ala	Phe	Tyr	Glu	Leu	Gln	Tyr	Arg	Gly	Arg	Glu	Leu	Arg
			85					90					95		
Phe	Asn	Leu	Thr	Ala	Asn	Gln	His	Leu	Leu	Ala	Pro	Gly	Phe	Val	Ser
		100						105					110		
Glu	Thr	Arg	Arg	Arg	Gly	Gly	Leu	Gly	Arg	Ala	His	Ile	Arg	Ala	His
	115						120					125			
Thr	Pro	Ala	Cys	His	Leu	Leu	Gly	Glu	Val	Gln	Asp	Pro	Glu	Leu	Glu
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Gly	Gly	Leu	Ala	Ala	Ile	Ser	Ala	Cys	Asp	Gly	Leu	Lys	Gly	Val	Phe
145				150					155					160	
Gln	Leu	Ser	Asn	Glu	Asp	Tyr	Phe	Ile	Glu	Pro	Leu	Asp	Ser	Ala	Pro
			165					170					175		
Ala	Arg	Pro	Gly	His	Ala	Gln	Pro	His	Val	Val	Tyr	Lys	Arg	Gln	Ala
	180						185						190		
Pro	Glu	Arg	Leu	Ala	Gln	Arg	Gly	Asp	Ser	Ser	Ala	Pro	Ser	Thr	Cys

195	200	205
Ser Ala Ser Val Pro Arg Ala Gly Val Ser Thr Gly Ala Leu Gly Ala		
210	215	220
Ala Ala Ala Val Ala Ala Ala Thr Ala Arg Arg Leu His Gln Arg Ser		
225	230	235
Val Ser Lys Glu Lys Trp Val Glu Thr Leu Val Val Ala Asp Ala Lys		
245	250	255
Met Val Glu Tyr His Gly Gln Pro Gln Val Glu Ser Tyr Val Leu Thr		
260	265	270
Ile Met Asn Met Val Ala Gly Leu Phe His Asp Pro Ser Ile Gly Asn		
275	280	285
Pro Ile His Ile Thr Ile Val Arg Leu Val Leu Leu Glu Asp Glu Glu		
290	295	300
Glu Asp Leu Lys Ile Thr His His Ala Asp Asn Thr Leu Lys Ser Phe		
305	310	315
Cys Lys Trp Gln Lys Ser Ile Asn Met Lys Gly Asp Ala His Pro Leu		
325	330	335
His His Asp Thr Ala Ile Leu Leu Thr Arg Lys Asp Leu Cys Ala Ala		
340	345	350
Met Asn Arg Pro Cys Glu Thr Leu Gly Leu Ser His Val Ala Gly Met		
355	360	365
Cys Gln Pro His Arg Ser Cys Ser Ile Asn Glu Asp Thr Gly Leu Pro		
370	375	380
Leu Ala Phe Thr Val Ala His Glu Leu Gly His Ser Phe Gly Ile Gln		
385	390	395
His Asp Gly Ser Gly Asn Asp Cys Glu Pro Val Gly Lys Arg Pro Phe		
405	410	415
Ile Met Ser Pro Gln Leu Leu Tyr Asp Ala Ala Pro Leu Thr Trp Ser		
420	425	430
Arg Cys Ser Arg Gln Tyr Ile Thr Arg Phe Leu Asp Arg Gly Trp Gly		
435	440	445
Leu Cys Leu Asp Asp Pro Pro Ala Lys Asp Ile Ile Asp Phe Pro Ser		
450	455	460
Val Pro Pro Gly Val Leu Tyr Asp Val Ser His Gln Cys Arg Leu Gln		
465	470	475
Tyr Gly Ala Tyr Ser Ala Phe Cys Glu Asp Met Asp Asn Val Cys His		
485	490	495
Thr Leu Trp Cys Ser Val Gly Thr Thr Cys His Ser Lys Leu Asp Ala		
500	505	510
Ala Val Asp Gly Thr Arg Cys Gly Glu Asn Lys Trp Cys Leu Ser Gly		
515	520	525
Glu Cys Val Pro Val Gly Phe Arg Pro Glu Ala Val Asp Gly Gly Trp		
530	535	540
Ser Gly Trp Ser Ala Trp Ser Ile Cys Ser Arg Ser Cys Gly Met Gly		
545	550	555
Val Gln Ser Ala Glu Arg Gln Cys Thr Gln Pro Thr Pro Lys Tyr Lys		
565	570	575
Gly Arg Tyr Cys Val Gly Glu Arg Lys Arg Phe Arg Leu Cys Asn Leu		
580	585	590
Gln Ala Cys Pro Ala Gly Arg Pro Ser Phe Arg His Val Gln Cys Ser		
595	600	605
His Phe Asp Ala Met Leu Tyr Lys Gly Gln Leu His Thr Trp Val Pro		
610	615	620
Val Val Asn Asp Val Asn Pro Cys Glu Leu His Cys Arg Pro Ala Asn		

625					630					635				640	
Glu	Tyr	Phe	Ala	Lys	Lys	Leu	Arg	Asp	Ala	Val	Val	Asp	Gly	Thr	Pro
				645					650					655	
Cys	Tyr	Gln	Val	Arg	Ala	Ser	Arg	Asp	Leu	Cys	Ile	Asn	Gly	Ile	Cys
			660					665					670		
Lys	Asn	Val	Gly	Cys	Asp	Phe	Glu	Ile	Asp	Ser	Gly	Ala	Met	Glu	Asp
		675					680					685			
Arg	Cys	Gly	Val	Cys	His	Gly	Asn	Gly	Ser	Thr	Cys	His	Thr	Val	Ser
	690					695					700				
Gly	Thr	Phe	Xaa	Arg	Arg	Pro	Arg	Val	Xaa	Gly	Tyr	Val	Asp	Val	Gly
705					710				715					720	
Leu	Ile	Pro	Ala	Gly	Ala	Arg	Glu	Ile	Arg	Ile	Gln	Glu	Val	Ala	Glu
				725					730					735	
Ala	Ala	Asn	Phe	Leu	Ala	Leu	Arg	Ser	Glu	Asp	Pro	Glu	Lys	Tyr	Phe
		740					745					750			
Leu	Asn	Gly	Gly	Trp	Thr	Ile	Gln	Trp	Asn	Gly	Asp	Tyr	Gln	Val	Ala
	755					760					765				
Gly	Thr	Thr	Phe	Thr	Tyr	Ala	Arg	Arg	Gly	Asn	Trp	Glu	Asn	Leu	Thr
	770					775					780				
Ser	Pro	Gly	Pro	Thr	Lys	Glu	Pro	Val	Trp	Ile	Gln	Val	Pro	Ala	Ser
785					790				795					800	
Arg	Gly	Pro	Gly	Gly	Gly	Ser	Arg	Gly	Gly	Val	Pro	Arg	Pro	Ser	Thr
			805						810					815	
Leu	His	Gly	Arg	Ser	Arg	Pro	Gly	Gly	Val	Ser	Pro	Gly	Ser	Val	Thr
		820					825					830			
Glu	Pro	Gly	Ser	Glu	Pro	Gly	Pro	Pro	Ala	Ala	Ala	Ser	Thr	Ser	Val
	835					840					845				
Ser	Pro	Ser	Leu	Lys	Trp	Pro	Asn	Leu	Val	Ala	Ala	Val	His	Arg	Gly
	850				855						860				
Gly	Trp	Gly	Gln	Ala	Pro	Leu	Gly	Leu	Gly	Gly	Trp	Arg	Arg	His	Leu
865					870				875					880	
Val	Leu	Met	Gly	Pro	Arg	Leu	Pro	Thr	Gln	Leu	Leu	Phe	Gln	Glu	Ser
			885						890					895	
Asn	Pro	Gly	Val	His	Tyr	Glu	Tyr	Thr	Ile	His	Arg	Glu	Ala	Gly	Gly
		900						905					910		
His	Asp	Glu	Val	Pro	Pro	Pro	Val	Phe	Ser	Trp	His	Tyr	Gly	Pro	Trp
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Thr	Lys	Cys	Thr	Val	Thr	Cys	Gly	Arg	Gly	Val	Gln	Arg	Gln	Asn	Val
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Tyr	Cys	Leu	Glu	Arg	Gln	Ala	Gly	Pro	Val	Asp	Glu	Glu	His	Cys	Asp
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Pro	Leu	Gly	Arg	Pro	Asp	Asp	Gln	Gln	Arg	Lys	Cys	Ser	Glu	Gln	Pro
			965						970					975	
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Val	Gly	Leu	Asp	Glu	Gln	Ser	Ala	Leu	Glu	Pro	Pro	Ala	Cys	Glu	His
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Pro	Ala	Thr	Trp	Ala	Val	Gly	Asn	Trp	Ser	Gln	Cys	Ser	Val	Thr	Cys
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1075 1080 1085  
Leu Pro Leu Cys Arg Trp Pro Leu Gly Thr Leu Gly Pro Glu Gly Ser  
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Gly Ser Gly Ser Ser Ser His Glu Leu Phe Asn Glu Ala Asp Phe Ile  
1105 1110 1115 1120  
Pro His His Leu Ala Pro Arg Pro Ser Pro Ala Ser Ser Pro Lys Pro  
1125 1130 1135  
Gly Thr Met Gly Asn Ala Ile Glu Glu Glu Ala Pro Glu Leu Asp Leu  
1140 1145 1150  
Pro Gly Pro Val Phe Val Asp Asp Phe Tyr Tyr Asp Tyr Asn Phe Ile  
1155 1160 1165  
Asn Phe His Glu Asp Leu Ser Tyr Gly Pro Ser Glu Glu Pro Asp Leu  
1170 1175 1180  
Asp Leu Ala Gly Thr Gly Asp Arg Thr Pro Pro Pro His Ser His Pro  
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Ala Ala Pro Ser Thr Gly Ser Pro Val Pro Ala Thr Glu Pro Pro Ala  
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Ala Lys Glu Glu Gly Val Leu Gly Pro Trp Ser Pro Ser Pro Trp Pro  
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Ser Gln Ala Gly Arg Ser Pro Pro Pro Pro Ser Glu Gln Thr Pro Gly  
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1265 1270 1275 1280  
Gly Leu Gln Thr Pro Ala Thr Pro Glu Ser Gln Asn Asp Phe Pro Val  
1285 1290 1295  
Gly Lys Asp Ser Gln Ser Gln Leu Pro Pro Pro Trp Arg Asp Arg Thr  
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1315 1320 1325  
His Leu Pro Pro Arg Pro Ser Ser Thr Leu Pro Pro Leu Ser Pro Val  
1330 1335 1340  
Gly Ser Thr His Ser Ser Pro Ser Pro Asp Val Ala Glu Leu Trp Thr  
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1380 1385 1390  
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Glu Pro Gly Thr Pro Ser Phe Pro Ala Pro Gly Pro Gly Ser Trp Asp  
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Gly Leu Gly His Met Pro Glu Pro Ala Leu Asn Pro Gly Pro Lys Gly  
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Gln Pro Glu Ser Leu Ser Pro Glu Val Pro Leu Ser Ser Arg Leu Leu  
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1475 1480 1485  
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Cys Ser Thr Thr Cys Gly Leu Gly Ala Val Trp Arg Pro Val Arg Cys  
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Ser Ser Gly Arg Asp Glu Asp Cys Ala Pro Ala Gly Arg Pro Gln Pro  
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Val Gln Cys Val Asp Thr Arg Asp Leu Arg Pro Leu Arg Pro Phe His  
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Cys Gln Pro Gly Pro Ala Lys Pro Pro Ala His Arg Pro Cys Gly Ala  
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1665 1670 1675 1680  
Ala Pro Cys Gly Gly Gly Val Gln Arg Arg Leu Val Lys Cys Val Asn  
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Ala Trp Pro Glu Ser Ser Arg Pro Cys Gly Thr Glu Asp Cys Glu Pro  
1715 1720 1725  
Val Glu Pro Pro Arg Cys Glu Arg Asp Arg Leu Ser Phe Gly Phe Cys  
1730 1735 1740  
Glu Thr Leu Arg Leu Leu Gly Arg Cys Gln Leu Pro Thr Ile Arg Thr  
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Gln Cys Cys Arg Ser Cys Ser Pro Pro Ser His Gly Ala Pro Ser Arg  
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Gly His Gln Arg Val Ala Arg Arg  
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&lt;210&gt; 2287

&lt;211&gt; 750

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2287

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180  
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240  
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300



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420  
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480  
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540  
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<210> 2288  
<211> 142  
<212> PRT  
<213> Homo sapiens

<400> 2288  
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Ile Phe Leu Tyr Gly Pro Cys Ser Ser Gln Pro Leu Ile Leu Glu Leu  
35 40 45  
Gly Thr Gly Ser Ala Thr Ser Met Leu Leu Ser Cys Cys Ser Pro Ala  
50 55 60  
Trp Asn Val Pro Tyr Leu Ala Asn Ser Tyr Cys Ser Ser Val Thr Leu  
65 70 75 80  
Leu Asp Thr Phe Leu Pro Leu Ser Leu Val Arg Cys Ser Pro Leu Gly  
85 90 95  
Ser His Gly Pro Leu Cys Val Pro Val Val Ala Gln Gln Lys Pro Pro  
100 105 110  
Ala Asp Gly Trp Val Ser Cys Pro Glu His Gly Ser Leu Arg Ala Glu  
115 120 125  
Ser Thr Trp Leu Ser Gly Gly Ala Gln Ser His Trp Leu His  
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<210> 2289  
<211> 381  
<212> DNA  
<213> Homo sapiens

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120  
gtgctgcaca agttctcggg ctacgggcag ctgtgcgagc gcggcctgga ggagctcatc  
180

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240  
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381

&lt;210&gt; 2290

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2290

Met	Asp	His	Cys	Val	Thr	Val	Glu	Arg	Glu	Leu	Glu	Lys	Val	Leu	His
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Lys	Phe	Ser	Gly	Tyr	Gly	Gln	Leu	Cys	Glu	Arg	Gly	Leu	Glu	Glu	Leu
		20					25					30			
Ile	Asp	Tyr	Thr	Gly	Gly	Leu	Lys	His	Gln	Ile	Leu	Gln	Ser	His	Gly
		35					40					45			
Gln	Asp	Ala	Glu	Leu	Ser	Gly	Thr	Leu	Ser	Leu	Val	Leu	Thr	Gln	Gly
		50					55					60			
Cys	Lys	Arg	Ile	Xaa	Arg	Gly	Tyr	Trp	Phe	Lys	Asn	Trp	Pro	Pro	Thr
65					70					75					80
Thr	Lys	Thr	Ser	Thr	Ala	Val	Phe	Leu	Gly	Leu	Glu	Lys	Pro	Leu	Met
				85					90						95
Arg	Ile	His	Phe												
				100											

&lt;210&gt; 2291

&lt;211&gt; 573

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2291

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120  
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180  
acatgttcgt tgtgacgatg cagctgagcc attgaatcga cggtcagcgc catgaacgcc  
240  
cgatgctcgt tgacggtaag actcgcgcgac ccagcaacgt cggcggttgt cgtgccctca  
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480  
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540

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573

<210> 2292  
<211> 140  
<212> PRT  
<213> Homo sapiens

<400> 2292  
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Asn Pro Ser Gly Glu Ala His Val Arg Ser Val Leu Asn Ala Lys Phe  
20 25 30  
Lys Ala Val Gly Ser Asp Arg Arg Ala Glu Asp Leu Gly Pro Gln Glu  
35 40 45  
Leu Arg Glu Ala Ser Ala Ala Phe Phe Ala Gly Gly His Asp Val Ile  
50 55 60  
Val Ala Arg Arg His Tyr Thr Asp Glu Gly Thr Thr Thr Ala Asp Val  
65 70 75 80  
Ala Gly Ser Ala Ser Leu Thr Val Asn Glu His Arg Ala Phe Met Ala  
85 90 95  
Leu Thr Val Asp Ser Met Ala Gln Leu His Arg His Asn Glu His Val  
100 105 110  
Arg Tyr Val Val Val Phe Gln Asn Trp Leu Lys Pro Ala Gly Ala Ser  
115 120 125  
Ile Asp His Leu His Lys Gln Val Val Ala Ile Asp  
130 135 140

<210> 2293  
<211> 358  
<212> DNA  
<213> Homo sapiens

<400> 2293  
acgcgtgaag gaatggaagc tgctctcgtc ggtgcacaca agactggcgg gtgcccattg  
60  
gtgaacactg tcgctaagaa ctggttgaac cggctcaaca cgccggatat gaaaccact  
120  
gaggagatca agcggcagtt ccaaggtctg cattggttgg gacgtaagta tgggctcaac  
180  
cacggagagt tctatcttga cgacgagcag tgggccaacgc tcatggccgg gtctctcttc  
240  
gaggcgaatc cgcgcattaa gagcaacttt gattccgagg gcgctgttgt ggatccggat  
300  
tccgattcac ttgctggggc tgatcgagat gcccgaggtg ctccggatgc atgccttc  
358

<210> 2294  
<211> 115  
<212> PRT  
<213> Homo sapiens

<400> 2294  
Met Glu Ala Ala Leu Val Gly Ala His Lys Thr Gly Gly Cys Pro Leu

```

      1           5           10           15
Val Asn Thr Val Ala Lys Asn Trp Leu Asn Arg Leu Asn Thr Pro Asp
      20           25           30
Met Lys Pro Thr Glu Glu Ile Lys Arg Gln Phe Gln Gly Leu His Trp
      35           40           45
Leu Gly Arg Lys Tyr Gly Leu Asn His Gly Glu Phe Tyr Leu Asp Asp
      50           55           60
Glu Gln Trp Ala Thr Leu Met Ala Gly Ser Ser Phe Glu Ala Asn Pro
      65           70           75           80
Arg Ile Lys Ser Asn Phe Asp Ser Glu Gly Ala Val Val Asp Pro Asp
      85           90           95
Ser Asp Ser Leu Ala Gly Ala Asp Arg Asp Ala Arg Gly Ala Ser Asp
      100          105          110
Ala Cys Leu
      115

```

<210> 2295  
 <211> 546  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2295
ggcaccgatc cgagtgggtg tgccgggatt aggnccgcatc tanaaacatt ctccgccctt
60
ggggcgatatg gctgctcggt cattaccgca ctggtagcgc aaaatacgcg cggcgtgcag
120
tcggtgtatc gtatcgaacc ggattttgtc ggtgcacaac tggactctgt gttcagcgat
180
gtccgcattg attccaccaa aatcggcatg ctggcagagg cggatatcgt ggaagcggtc
240
gcgagcgccc tcaaacatta tcgcgttaaa aacgtggtac ttgatacggg gatgctggcg
300
aaaagtggcg atccgctgct atctcctgct gctgtcgaaa ctctgcgaaa acaccttctg
360
ccacacgtcg cgctgatcac gccaaatttg ccggaggcgg cggcgtgct ggatgcgcct
420
catgcccgta ccgagcacga gatgaaagag caggggcgcg cacttctggc gcttggctgc
480
gaggcagtgc tgatgaaagg cggccatctt gacgatcctg agagcccgga ctggctcttc
540
acgcgt
546

```

<210> 2296  
 <211> 182  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2296
Gly Thr Asp Pro Ser Gly Gly Ala Gly Ile Arg Xaa Asp Leu Xaa Thr
      1           5           10           15
Phe Ser Ala Leu Gly Ala Tyr Gly Cys Ser Val Ile Thr Ala Leu Val
      20           25           30
Ala Gln Asn Thr Arg Gly Val Gln Ser Val Tyr Arg Ile Glu Pro Asp

```

```

      35      40      45
Phe Val Gly Ala Gln Leu Asp Ser Val Phe Ser Asp Val Arg Ile Asp
      50      55      60
Ser Thr Lys Ile Gly Met Leu Ala Glu Ala Asp Ile Val Glu Ala Val
65      70      75      80
Ala Glu Arg Leu Lys His Tyr Arg Val Lys Asn Val Val Leu Asp Thr
      85      90      95
Val Met Leu Ala Lys Ser Gly Asp Pro Leu Leu Ser Pro Ala Ala Val
      100      105      110
Glu Thr Leu Arg Lys His Leu Leu Pro His Val Ala Leu Ile Thr Pro
      115      120      125
Asn Leu Pro Glu Ala Ala Ala Leu Leu Asp Ala Pro His Ala Arg Thr
      130      135      140
Glu His Glu Met Lys Glu Gln Gly Arg Ala Leu Leu Ala Leu Gly Cys
145      150      155      160
Glu Ala Val Leu Met Lys Gly Gly His Leu Asp Asp Pro Glu Ser Pro
      165      170      175
Asp Trp Leu Phe Thr Arg
      180

```

<210> 2297  
 <211> 414  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2297
gggaattccg ggcccttccc cccaagcccg ggtaattttt tgtattttta aaaaaaagg
60
gaattttccc acgttggggg ggggggggtc ggactttttc ccccaaaaac ccccccccc
120
caccccccca aaggccgaaa agcagggccca aaaccccccg gacccccccc gggggggggca
180
aaaggaaaaa cccctttttt tttttttttt ttttatacac atgagggtct ctggttaata
240
aatgttgaga ttaggggtta ggtgagatta aacagggtct ttttttcatt atttctcgga
300
gtctttatga tgctccacac cagtacttct caaagctgac tgtgtatata aaacactggg
360
gatctgaccc acatgtaaag tctgatttct ttgggtctggg gcaggcctga aatn
414

```

<210> 2298  
 <211> 67  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2298
Lys Lys Arg Glu Phe Ser His Val Gly Gly Gly Gly Phe Gly Leu Phe
1      5      10      15
Pro Pro Lys Thr Pro Pro Pro His Pro Pro Lys Gly Arg Lys Ala Gly
20      25      30
Pro Lys Pro Pro Gly Pro Pro Pro Gly Gly Ala Lys Gly Lys Thr Pro
35      40      45
Phe Phe Phe Phe Phe Phe Tyr Thr His Glu Gly Leu Trp Leu Ile Asn

```

50  
Val Glu Met  
65

55

60

<210> 2299  
<211> 987  
<212> DNA  
<213> Homo sapiens

<400> 2299  
ngagatgtct aagttat ttttttcccg gaaggcaa at ggctggcg tg gaagcacaac  
60  
ccgctttcac tcttcgaatt tgtgcttagc tcttttcttg taccctgcga ctctgaccca  
120  
acatgctgtg atgtgtgccg agggaggaat tggtcagcta cacaacctgg atcttaccac  
180  
agtttggata tgactgaggc tctccaatgg gccagatata actggcgacg gctgatcaga  
240  
gggtgcaacca gggatgatga ttcagggcca tacaactatt cctcgttgct cgctgtggg  
300  
cgcaagtcct ctcatatccc taaactgtca ggaaggcacc ggattgttgt tccccacatc  
360  
cagcccttca aggatgagta tgagaagttc tccggagcct atgtgaacaa tcgaatacga  
420  
acaacaaagt acacacttct gaattttgtg ccaagaaatt tatttgaaca atttcacaga  
480  
gctgcccaatt tatatttctt gttcctagtt gtccctgaact gggtagcctt ggtagaagcc  
540  
ttccaaaagg aaatcaccat gttgcctctg gtgggtggcc ttacaattat cgcaattaaa  
600  
gatggcctgg aagattatcg gaaatacaaa attgacaaac agatcaataa tttaataact  
660  
aaagtttata gtaggaaaga gaaaaaatac attgaccgat gctggaaaga cgttactgtt  
720  
ggggacttta ttcgcctctc ctgcaacgag gtcacccctg cagacatggg actactcttt  
780  
tccactgata cagatggaat ctgtcacatt gagacttctg gtcttgatgg agagagcaat  
840  
ttaaacaga ggcagggtgt tgggggatat gcagaacagg actctgaagt tgatcctgag  
900  
aagttttcca gtaggataga atgtgaaagc ccaacaatg acctcagcag attccgaggc  
960  
ttcctagaac attccaacaa agaacgc  
987

<210> 2300  
<211> 266  
<212> PRT  
<213> Homo sapiens

<400> 2300  
Met Thr Glu Ala Leu Gln Trp Ala Arg Tyr His Trp Arg Arg Leu Ile  
1 5 10 15  
Arg Gly Ala Thr Arg Asp Asp Asp Ser Gly Pro Tyr Asn Tyr Ser Ser

20 25 30  
 Leu Leu Ala Cys Gly Arg Lys Ser Ser Gln Ile Pro Lys Leu Ser Gly  
 35 40 45  
 Arg His Arg Ile Val Val Pro His Ile Gln Pro Phe Lys Asp Glu Tyr  
 50 55 60  
 Glu Lys Phe Ser Gly Ala Tyr Val Asn Asn Arg Ile Arg Thr Thr Lys  
 65 70 75 80  
 Tyr Thr Leu Leu Asn Phe Val Pro Arg Asn Leu Phe Glu Gln Phe His  
 85 90 95  
 Arg Ala Ala Asn Leu Tyr Phe Leu Phe Leu Val Val Leu Asn Trp Val  
 100 105 110  
 Pro Leu Val Glu Ala Phe Gln Lys Glu Ile Thr Met Leu Pro Leu Val  
 115 120 125  
 Val Val Leu Thr Ile Ile Ala Ile Lys Asp Gly Leu Glu Asp Tyr Arg  
 130 135 140  
 Lys Tyr Lys Ile Asp Lys Gln Ile Asn Asn Leu Ile Thr Lys Val Tyr  
 145 150 155 160  
 Ser Arg Lys Glu Lys Lys Tyr Ile Asp Arg Cys Trp Lys Asp Val Thr  
 165 170 175  
 Val Gly Asp Phe Ile Arg Leu Ser Cys Asn Glu Val Ile Pro Ala Asp  
 180 185 190  
 Met Val Leu Leu Phe Ser Thr Asp Pro Asp Gly Ile Cys His Ile Glu  
 195 200 205  
 Thr Ser Gly Leu Asp Gly Glu Ser Asn Leu Lys Gln Arg Gln Val Val  
 210 215 220  
 Arg Gly Tyr Ala Glu Gln Asp Ser Glu Val Asp Pro Glu Lys Phe Ser  
 225 230 235 240  
 Ser Arg Ile Glu Cys Glu Ser Pro Asn Asn Asp Leu Ser Arg Phe Arg  
 245 250 255  
 Gly Phe Leu Glu His Ser Asn Lys Glu Arg  
 260 265

&lt;210&gt; 2301

&lt;211&gt; 390

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2301

tatcccaagc gcttcaaatt tgatgccgat gagttctact tgaaatcgtc cgaggaaatg  
 60  
 nncgccacct ctcccgcgna tttccctgaa gcctgcgata acactatgga aatcgctgag  
 120  
 nncggttgcca cggtgaattc aacacaaacg caanactaca tgcccgattt cccaccccg  
 180  
 gagggggaga atgaggaatc ctggttcgtc aaagaagttg aacgcggttt gcactaccga  
 240  
 ttccccgagg gcattcccgga tgacgtacgc aagcaggcag attatgaagt agggattatt  
 300  
 acccagatgg gattccccgg ctacttcttg gtggtcgcggt attttatcaa ctgggcgaag  
 360  
 aataacggaa ttcgagtggg ccccgggcgt  
 390

&lt;210&gt; 2302

<211> 130  
<212> PRT  
<213> Homo sapiens

<400> 2302  
Tyr Pro Lys Arg Phe Lys Phe Asp Ala Asp Glu Phe Tyr Leu Lys Ser  
1 5 10 15  
Ser Glu Glu Met Xaa Ala Thr Ser Ser Ala Xaa Phe Pro Glu Ala Cys  
20 25 30  
Asp Asn Thr Met Glu Ile Ala Glu Xaa Val Ala Thr Leu Asn Ser Thr  
35 40 45  
Gln Thr Gln Xaa Tyr Met Pro Asp Phe Pro Thr Pro Glu Gly Glu Asn  
50 55 60  
Glu Glu Ser Trp Phe Val Lys Glu Val Glu Arg Gly Leu His Tyr Arg  
65 70 75 80  
Phe Pro Glu Gly Ile Pro Asp Asp Val Arg Lys Gln Ala Asp Tyr Glu  
85 90 95  
Val Gly Ile Ile Thr Gln Met Gly Phe Pro Gly Tyr Phe Leu Val Val  
100 105 110  
Ala Asp Phe Ile Asn Trp Ala Lys Asn Asn Gly Ile Arg Val Gly Pro  
115 120 125  
Gly Arg  
130

<210> 2303  
<211> 638  
<212> DNA  
<213> Homo sapiens

<400> 2303  
nnggateccag gctgcccctg tgtgtctcct tcagtcttcg ttagctgcct gctgctgtct  
60  
gcacctgtgt ttggctacct gggcgaccga catagccgca aggctaccat gagcttcggt  
120  
atcttgctgt ggtcaggagc tggcctctct agctccttca tctcccccg gtattcttgg  
180  
ctcttcttcc tgtcccgggg catcgagggc actggctcgg ccagctactc caccatcgcg  
240  
cccacgtcc tggggacact cttcgtgagg gaccagcgca cccgcgtgct ggctgtcttc  
300  
tacatcttta tcccgttgg aagtggctcg ggctacgtgc tggggtcggc tgtgacgatg  
360  
ctgactggga actggcgctg ggccctccga gtcatgcctt gcctggaggc cgtggccttg  
420  
atcctgctta tctgctggt tccagacca cccgggggag ctgccgagac acagggggag  
480  
ggggccgtgg gaggttcag aagcagctgg tgtgaggacg tcagatacct ggggaaaaac  
540  
tggagttttg tgtggtcgac cctcggagtg accgccatgg cttttgtgac tggagccctg  
600  
gggttctggg cccccaagtt tctgctcgag gcacgcgt  
638

<210> 2304



<211> 212  
<212> PRT  
<213> Homo sapiens

<400> 2304  
Xaa Asp Pro Gly Cys Pro Cys Val Ser Pro Ser Val Phe Val Ser Cys  
1 5 10 15  
Leu Leu Leu Ser Ala Pro Val Phe Gly Tyr Leu Gly Asp Arg His Ser  
20 25 30  
Arg Lys Ala Thr Met Ser Phe Gly Ile Leu Leu Trp Ser Gly Ala Gly  
35 40 45  
Leu Ser Ser Ser Phe Ile Ser Pro Arg Tyr Ser Trp Leu Phe Phe Leu  
50 55 60  
Ser Arg Gly Ile Glu Gly Thr Gly Ser Ala Ser Tyr Ser Thr Ile Ala  
65 70 75 80  
Pro Thr Val Leu Gly Asp Leu Phe Val Arg Asp Gln Arg Thr Arg Val  
85 90 95  
Leu Ala Val Phe Tyr Ile Phe Ile Pro Val Gly Ser Gly Leu Gly Tyr  
100 105 110  
Val Leu Gly Ser Ala Val Thr Met Leu Thr Gly Asn Trp Arg Trp Ala  
115 120 125  
Leu Arg Val Met Pro Cys Leu Glu Ala Val Ala Leu Ile Leu Leu Ile  
130 135 140  
Leu Leu Val Pro Asp Pro Pro Arg Gly Ala Ala Glu Thr Gln Gly Glu  
145 150 155 160  
Gly Ala Val Gly Gly Phe Arg Ser Ser Trp Cys Glu Asp Val Arg Tyr  
165 170 175  
Leu Gly Lys Asn Trp Ser Phe Val Trp Ser Thr Leu Gly Val Thr Ala  
180 185 190  
Met Ala Phe Val Thr Gly Ala Leu Gly Phe Trp Ala Pro Lys Phe Leu  
195 200 205  
Leu Glu Ala Arg  
210

<210> 2305  
<211> 340  
<212> DNA  
<213> Homo sapiens

<400> 2305  
gccccgcct ctatcttccg gcatcgtcac agtcgcatcg tgacgggtact ggctggagtc  
60  
tcggaccagc acactttgac cgtcgtggtc gcctcgtgac atggggtaac gcgaacctcg  
120  
tcgtcctgt tcttgacctc ttccgtgccc ccattgacaa cgatcgggca agttcactgg  
180  
cccgaacgc tattggtgac gcagcactcg cagctggtct cgaccgactc gtccacacca  
240  
cggcgtcggc gcgcgacgag ggcgatgagt tggcgtcgt tactcgcagc gctgctgccg  
300  
ccgcacgcaa ttccatgacg acaacgtgga gttggcgcgc  
340

<210> 2306

<211> 101  
<212> PRT  
<213> Homo sapiens

<400> 2306  
Met Glu Leu Arg Ala Ala Ala Ala Ala Leu Arg Val Thr Thr Thr Asn  
1 5 10 15  
Ser Ser Pro Ser Ser Arg Thr Asp Ala Val Val Trp Thr Ser Arg Ser  
20 25 30  
Arg Pro Ala Ala Ser Ala Ala Ser Pro Ile Ala Leu Arg Ala Ser Glu  
35 40 45  
Leu Ala Arg Ser Leu Ser Met Gly Ala Arg Lys Arg Ser Arg Thr Gly  
50 55 60  
Ala Thr Arg Phe Ala Leu Pro His Val Thr Arg Arg Pro Arg Arg Ser  
65 70 75 80  
Lys Cys Ala Gly Pro Arg Leu Gln Pro Val Pro Ser Arg Cys Asp Cys  
85 90 95  
Asp Asp Ala Gly Arg  
100

<210> 2307  
<211> 360  
<212> DNA  
<213> Homo sapiens

<400> 2307  
ngcttctcag ctgaaggggg agataaagct ctacataaga tgggtccagg tgggggcaaa  
60  
gccaaggcac tgggtggggc tggcagtggg agcaagggct cagcaggtgg cggaagcaag  
120  
cgacggctga gcagcgaaga cagctccctg gagccagacc tggccgagat gagcctggat  
180  
gacagcagcc tggccctggg cgcagaggcc aggaccttcg ggggattccc tgagagccct  
240  
ccaccctgtc ctctccacgg tggctcccga ggcccttcca ctttcttcc tgagccccca  
300  
gatacttatg aagaagatgg tgatgagagt ggcaatgggc ttcccaaaac caaagaggca  
360

<210> 2308  
<211> 120  
<212> PRT  
<213> Homo sapiens

<400> 2308  
Xaa Phe Ser Ala Glu Gly Gly Asp Lys Ala Leu His Lys Met Gly Pro  
1 5 10 15  
Gly Gly Gly Lys Ala Lys Ala Leu Gly Gly Ala Gly Ser Gly Ser Lys  
20 25 30  
Gly Ser Ala Gly Gly Gly Ser Lys Arg Arg Leu Ser Ser Glu Asp Ser  
35 40 45  
Ser Leu Glu Pro Asp Leu Ala Glu Met Ser Leu Asp Asp Ser Ser Leu  
50 55 60  
Ala Leu Gly Ala Glu Ala Arg Thr Phe Gly Gly Phe Pro Glu Ser Pro

```
<210> 2309
<211> 395
<212> DNA
<213> Homo sapiens
```

```
<210> 2310
<211> 108
<212> PRT
<213> Homo sapiens
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```
<210> 2311
<211> 378
<212> DNA
<213> Homo sapiens
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&lt;400&gt; 2311

gtgcacgccg agatgctgcc gcaagacaag cagcgtgtcg tcggcgagtt gaagcgccag  
60  
ggcttctcag tgatcaaggt cggcgatggc atcaatgatt gcgacgctct cgccgcggcg  
120  
gatgtcggca gtcccatggg cggcagcgcg gacgtggctc tcgaaacggc cgatgctgcc  
180  
gtccttcacg gacgggtggg ggacgtcttc gcgatgatcg ccctatcgaa gcgaaccatg  
240  
gccaacattc gacagaacat cgcgatcgcg atcgggctaa aggcggtgtt ccttgtaacg  
300  
accgtcgtcg gcatcacggg gctttggcct gcaatcctcg ccgatacggg gaccacggag  
360  
cttgtgacca tgaacgcg  
378

&lt;210&gt; 2312

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2312

Val	His	Ala	Glu	Met	Leu	Pro	Gln	Asp	Lys	Gln	Arg	Val	Val	Gly	Glu
1				5					10					15	
Leu	Lys	Arg	Gln	Gly	Phe	Ser	Val	Ile	Lys	Val	Gly	Asp	Gly	Ile	Asn
			20					25					30		
Asp	Cys	Asp	Ala	Leu	Ala	Ala	Ala	Asp	Val	Gly	Ser	Pro	Met	Gly	Gly
		35					40					45			
Ser	Ala	Asp	Val	Ala	Leu	Glu	Thr	Ala	Asp	Ala	Ala	Val	Leu	His	Gly
		50				55					60				
Arg	Val	Gly	Asp	Val	Phe	Ala	Met	Ile	Ala	Leu	Ser	Lys	Arg	Thr	Met
65					70				75					80	
Ala	Asn	Ile	Arg	Gln	Asn	Ile	Ala	Ile	Ala	Ile	Gly	Leu	Lys	Ala	Val
			85					90						95	
Phe	Leu	Val	Thr	Thr	Val	Val	Gly	Ile	Thr	Gly	Leu	Trp	Pro	Ala	Ile
			100				105						110		
Leu	Ala	Asp	Thr	Gly	Thr	Thr	Glu	Leu	Val	Thr	Met	Asn	Ala		
		115					120					125			

&lt;210&gt; 2313

&lt;211&gt; 669

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2313

ctagtggcat ggtctcgctg gtcttttagtg gagcataccg acacatcggt gactcaaacg  
60  
atccgaatca tggctcgctc tggttggcct ggaaccatta acgtacgcct caccatcgc  
120  
ttaagcgacg ccggtctagc tgtcgaagtc accgcgcgca atgtcggtag gacagcgggg  
180  
ccgcttgat acgcagcaca cccctatctc tgtctgggtg gcaccatcga cgactggaca  
240

gtcgacgccc cgtttacctc gtggttacag gtcgatgac ggctgctacc aatgcagatg  
 300  
 cgcgagatgg acagcatcca cgcgctgaac ggtctcacgg gcggacagcg caccttcgat  
 360  
 accgcttaca ccgtgaaagg aggacggaac cgtcggatcg cccgcatggc gtatccgggt  
 420  
 ctcaacggtg aaacgagcca cgaattgtgg ggcgacgccg cgatgagctg ggtgcaagtc  
 480  
 tacactccag acgaccgcca cagtctggcc atcgagccaa tgacctgcgg ccagatgca  
 540  
 tttaatgagg gcccgaccca cggtgacgtc attcgactgg agcccggtaa tgacgtcaca  
 600  
 ctgcactggg gcacgccta acccgcgga gctcgaaagg acaaggacgg gaaggcagga  
 660  
 ttcacgct  
 669

<210> 2314  
 <211> 206  
 <212> PRT  
 <213> Homo sapiens

<400> 2314  
 Leu Val Ala Trp Ser Arg Trp Ser Leu Val Glu His Thr Asp Thr Ser  
 1 5 10 15  
 Val Thr Gln Thr Ile Arg Ile Met Ala Arg Pro Gly Trp Pro Gly Thr  
 20 25 30  
 Ile Asn Val Arg Leu Thr His Arg Leu Ser Asp Ala Gly Leu Ala Val  
 35 40 45  
 Glu Val Thr Ala Arg Asn Val Gly Thr Thr Ala Gly Pro Leu Gly Tyr  
 50 55 60  
 Ala Ala His Pro Tyr Leu Cys Leu Gly Gly Thr Ile Asp Asp Trp Thr  
 65 70 75 80  
 Val Asp Ala Pro Phe Thr Ser Trp Leu Gln Val Asp Asp Arg Leu Leu  
 85 90 95  
 Pro Met Gln Met Arg Glu Met Asp Ser Ile His Ala Leu Asn Gly Leu  
 100 105 110  
 Thr Gly Gly Gln Arg Thr Phe Asp Thr Ala Tyr Thr Val Lys Gly Gly  
 115 120 125  
 Arg Asn Arg Arg Ile Ala Arg Met Ala Tyr Pro Gly Leu Asn Gly Glu  
 130 135 140  
 Thr Ser His Glu Leu Trp Gly Asp Ala Ala Met Ser Trp Val Gln Val  
 145 150 155 160  
 Tyr Thr Pro Asp Asp Arg His Ser Leu Ala Ile Glu Pro Met Thr Cys  
 165 170 175  
 Gly Pro Asp Ala Phe Asn Glu Gly Pro Thr His Gly Asp Val Ile Arg  
 180 185 190  
 Leu Glu Pro Gly Asn Asp Val Thr Leu His Trp Gly Ile Ala  
 195 200 205

<210> 2315  
 <211> 546  
 <212> DNA  
 <213> Homo sapiens

<400> 2315  
 nacgcgtccc tcacgatac cgagcccgga atgggaaaac ggggtgtatcg cgttgaggcc  
 60  
 acccaaggcc gaccaattcg catcgataag gcggtcgctt atcacacttc tcgcggcgtg  
 120  
 ccggtacatg aactgtttga ccgagtgcgc cgcagcttag accgagtgcg tgaacagggg  
 180  
 cacaacgtct actacgacga acagcgtgca tggcttgacg attactgggc aacggctgat  
 240  
 gttgagggtcg aggggtgcccc gaccgggtatt cagcaggtcg tcagggtggaa ccttttccag  
 300  
 attgtctcagg catcagcccc tgcagatcaa cttggcattc cggcaaaggg tgtaaccggg  
 360  
 tcaggctatg aaggccacta cttttgggac actgaggttt atgtcatccc gatgttgacc  
 420  
 tacactcatc caagaatcgc tgagaatgcg ctgagattcc ggggtgaatac ctttccgcaa  
 480  
 gctcgacgcc gggctaagga attgtctgaa cgaggcgccc ttttcccggtg gcgaacaatc  
 540  
 accggt  
 546

<210> 2316  
 <211> 182  
 <212> PRT  
 <213> Homo sapiens

<400> 2316  
 Xaa Ala Ser Leu Ile Asp Thr Glu Pro Gly Met Gly Lys Arg Val Tyr  
 1 5 10 15  
 Arg Val Glu Ala Thr Gln Gly Arg Pro Ile Arg Ile Asp Lys Ala Val  
 20 25 30  
 Ala Tyr His Thr Ser Arg Gly Val Pro Val His Glu Leu Phe Asp Arg  
 35 40 45  
 Val Arg Arg Ser Leu Asp Arg Val Arg Glu Gln Gly His Asn Val Tyr  
 50 55 60  
 Tyr Asp Glu Gln Arg Ala Trp Leu Asp Asp Tyr Trp Ala Thr Ala Asp  
 65 70 75 80  
 Val Glu Val Glu Gly Ala Pro Thr Gly Ile Gln Gln Ala Val Arg Trp  
 85 90 95  
 Asn Leu Phe Gln Ile Ala Gln Ala Ser Ala Arg Ala Asp Gln Leu Gly  
 100 105 110  
 Ile Pro Ala Lys Gly Val Thr Gly Ser Gly Tyr Glu Gly His Tyr Phe  
 115 120 125  
 Trp Asp Thr Glu Val Tyr Val Ile Pro Met Leu Thr Tyr Thr His Pro  
 130 135 140  
 Arg Ile Ala Glu Asn Ala Leu Arg Phe Arg Val Asn Thr Leu Pro Gln  
 145 150 155 160  
 Ala Arg Arg Arg Ala Lys Glu Leu Ser Glu Arg Gly Ala Leu Phe Pro  
 165 170 175  
 Trp Arg Thr Ile Thr Gly  
 180

<210> 2317  
<211> 496  
<212> DNA  
<213> Homo sapiens

<400> 2317  
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240  
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300  
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360  
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cctgctcacg ggtgagcgcg acgatgcgag tgaggtggag gccgtagagg agcacgagca  
480  
accagcggc acgcgt  
496

<210> 2318  
<211> 108  
<212> PRT  
<213> Homo sapiens

<400> 2318  
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1 5 10 15  
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20 25 30  
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35 40 45  
Leu Pro Gly Lys Ser His Pro Ser Gly Arg Cys Leu Asp Val Ser Ala  
50 55 60  
Ser Ser Ala Ile Ala Phe Pro Arg Thr Ser Gly Ser Ser Ile Gly Ser  
65 70 75 80  
Ala Pro Met Val Ser Phe Pro Gly Arg Asp Val Thr Ser Thr Cys Ser  
85 90 95  
Arg Val Ser Ala Thr Met Arg Val Arg Trp Arg Pro  
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<210> 2319  
<211> 1748  
<212> DNA  
<213> Homo sapiens

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120  
tttatagtga aaccagctaa tgggtgcaatg ggtcatggga tttctttgat aagaaatggt  
180  
gacaaacttc catctcagga tcatttgatt gttcaagaat acattgaaaa gcctttccta  
240  
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300  
aaaatatattc tctaccatga tgggcttggt cgaatgggta cagagaagta cattccacct  
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480  
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660  
attttggtgg atagaaaact aaagccatgg cttctggaga ttaaccgagc cccaagcttt  
720  
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780  
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840  
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900  
gaacagcaga gacaccagtt ggagaggcgg aaagaagagt tgaaagagag actcgctcaa  
960  
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1020  
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1080  
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1140  
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1200  
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1260  
agtactgaga taatgaaaag accaaagtac tgcagcagtg acagcagtta tgatagtagc  
1320  
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1380  
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1440  
tccataagac gttcagtcag ctgccctcgg tccatctctg ctcaatcacc ttccagtggg  
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gacaccgccc cattttctgc tcaacaaatg atatctgtgt cacggccaac ttctgcatct  
1560  
cggtcacatt ccttaaaccg gggccttcc cctacatgag gcctctgcct cacagtaatg  
1620  
atgcctgctc taccaactct caagtgagtg agtctttgcg gcaactgaaa aaaaagaac  
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1740

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1748

<210> 2320

<211> 532

<212> PRT

<213> Homo sapiens

<400> 2320

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		20					25					30			
Lys	Lys	Lys	Arg	Lys	Gln	Lys	Thr	Phe	Ile	Val	Lys	Pro	Ala	Asn	Gly
		35				40					45				
Ala	Met	Gly	His	Gly	Ile	Ser	Leu	Ile	Arg	Asn	Gly	Asp	Lys	Leu	Pro
	50					55				60					
Ser	Gln	Asp	His	Leu	Ile	Val	Gln	Glu	Tyr	Ile	Glu	Lys	Pro	Phe	Leu
65				70					75					80	
Met	Glu	Gly	Tyr	Lys	Phe	Asp	Leu	Arg	Ile	Tyr	Ile	Leu	Val	Thr	Ser
		85						90					95		
Cys	Asp	Pro	Leu	Lys	Ile	Phe	Leu	Tyr	His	Asp	Gly	Leu	Val	Arg	Met
		100					105					110			
Gly	Thr	Glu	Lys	Tyr	Ile	Pro	Pro	Asn	Glu	Ser	Asn	Leu	Thr	Gln	Leu
	115					120					125				
Tyr	Met	His	Leu	Thr	Asn	Tyr	Ser	Val	Asn	Lys	His	Asn	Glu	His	Phe
	130				135					140					
Glu	Arg	Asp	Glu	Thr	Glu	Asn	Lys	Gly	Ser	Lys	Arg	Ser	Ile	Lys	Trp
145				150				155						160	
Phe	Thr	Glu	Phe	Leu	Gln	Ala	Asn	Gln	His	Asp	Val	Ala	Lys	Phe	Trp
		165					170					175			
Ser	Asp	Ile	Ser	Glu	Leu	Val	Val	Lys	Thr	Leu	Ile	Val	Ala	Glu	Pro
	180					185						190			
His	Val	Leu	His	Ala	Tyr	Arg	Met	Cys	Arg	Pro	Gly	Gln	Pro	Pro	Gly
	195					200					205				
Ser	Glu	Ser	Val	Cys	Phe	Glu	Val	Leu	Gly	Phe	Asp	Ile	Leu	Leu	Asp
	210			215					220						
Arg	Lys	Leu	Lys	Pro	Trp	Leu	Leu	Glu	Ile	Asn	Arg	Ala	Pro	Ser	Phe
225			230					235						240	
Gly	Thr	Asp	Gln	Lys	Ile	Asp	Tyr	Asp	Val	Lys	Arg	Gly	Val	Leu	Leu
		245					250						255		
Asn	Ala	Leu	Lys	Leu	Leu	Asn	Ile	Arg	Thr	Ser	Asp	Lys	Arg	Arg	Asn
	260					265						270			
Leu	Ala	Lys	Gln	Lys	Ala	Glu	Ala	Gln	Arg	Arg	Leu	Tyr	Gly	Gln	Asn
	275					280					285				
Ser	Ile	Lys	Arg	Leu	Leu	Pro	Gly	Ser	Ser	Asp	Trp	Glu	Gln	Gln	Arg
	290				295				300						
His	Gln	Leu	Glu	Arg	Arg	Lys	Glu	Glu	Leu	Lys	Glu	Arg	Leu	Ala	Gln
305			310				315							320	
Val	Arg	Lys	Gln	Ile	Ser	Arg	Glu	Glu	His	Glu	Asn	Arg	His	Met	Gly
		325					330					335			
Asn	Tyr	Arg	Arg	Ile	Tyr	Pro	Pro	Glu	Asp	Lys	Ala	Leu	Leu	Glu	Lys

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      340      345      350
Tyr Glu Asn Leu Leu Ala Val Ala Phe Gln Thr Phe Leu Ser Gly Arg
      355      360      365
Ala Ala Ser Phe Gln Arg Glu Leu Asn Asn Pro Leu Lys Arg Met Lys
      370      375      380
Glu Glu Asp Ile Leu Asp Leu Leu Glu Gln Cys Glu Ile Asp Asp Glu
385      390      395      400
Lys Leu Met Gly Lys Thr Thr Lys Thr Arg Gly Pro Lys Pro Leu Cys
      405      410      415
Ser Met Pro Glu Ser Thr Glu Ile Met Lys Arg Pro Lys Tyr Cys Ser
      420      425      430
Ser Asp Ser Ser Tyr Asp Ser Ser Ser Ser Ser Ser Glu Ser Asp Glu
      435      440      445
Asn Glu Lys Glu Glu Tyr Gln Asn Lys Lys Arg Glu Lys Gln Val Thr
      450      455      460
Tyr Asn Leu Lys Pro Ser Asn His Tyr Lys Leu Ile Gln Gln Pro Ser
465      470      475      480
Ser Ile Arg Arg Ser Val Ser Cys Pro Arg Ser Ile Ser Ala Gln Ser
      485      490      495
Pro Ser Ser Gly Asp Thr Arg Pro Phe Ser Ala Gln Gln Met Ile Ser
      500      505      510
Val Ser Arg Pro Thr Ser Ala Ser Arg Ser His Ser Leu Asn Pro Gly
      515      520      525
Leu Pro Pro Thr
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<210> 2321  
 <211> 433  
 <212> DNA  
 <213> Homo sapiens

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120
acaggtcata atggcaggta acagaccatt tattgaagtg ctgaaacaaa tagaaaacaa
180
agtcaggac accatcacag agcagtactt cccttgtag atactctcag ctaagtaaga
240
attgagttag acaacaataa aacaaatacc cataggcttt tcaaacagta acaaccgct
300
cagggttagc agcatttcta gaccttgatg gtaaaatgat gttctcaacc ttgctttca
360
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cagaggtgga gtg
433

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<210> 2322  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 2322

Met Leu Leu Thr Leu Ser Gly Leu Leu Leu Phe Glu Lys Pro Met Gly  
 1 5 10 15  
 Ile Cys Phe Ile Val Val Ser Leu Asn Ser Tyr Leu Ala Glu Ser Ile  
 20 25 30  
 Ser Gln Gly Lys Tyr Cys Ser Val Met Val Ser Trp Thr Leu Phe Ser  
 35 40 45  
 Ile Cys Phe Ser Thr Ser Ile Asn Gly Leu Leu Pro Ala Ile Met Thr  
 50 55 60  
 Cys Met His Leu Leu Ser Ser Phe Ser Lys Gln Lys Lys Leu Cys Gly  
 65 70 75 80  
 Cys Ile Ser Arg Thr Leu Asn His Phe Gln Asp Ser Ile Glu Leu Glu  
 85 90 95  
 Thr His Ile Asp Thr Ser Thr Gln Leu  
 100 105

&lt;210&gt; 2323

&lt;211&gt; 532

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2323

acgcgtcaaa actggcaaa ctggcggctt agggggaggg gcaagtggac ttggaggccc  
 60  
 tcctccactg tgcaccccct tggaaaaaaa gcggaggggg catcaagtaa aagtttcttg  
 120  
 ccaggcagag ccagctcggc ggccccccgc acatagctgg ggtagcagg ggttgcttct  
 180  
 ctgccgggca cagcgncttc caggagccag ccggggagag ctgagccaag gccgaaggag  
 240  
 ccgcctgcgg gcttagccgc cccctcccgc ccgttgggcc cagagcggac gctgggacgc  
 300  
 ccggggtctg gcagctctgc gcccggttag gagcgggagg gcgagcatta gcctgcgtcc  
 360  
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 420  
 ctgtcagtga gcgcccggat tgcacggccc ccgggtagtg cctgccggcg aggggcggga  
 480  
 gctcgggtga cttggccatc cccatccccg gccagggccc ggagggcggc cg  
 532

&lt;210&gt; 2324

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2324

Thr Arg Gln Asn Trp Gln Ser Trp Arg Leu Arg Gly Arg Gly Lys Trp  
 1 5 10 15  
 Thr Trp Arg Pro Ser Ser Thr Val His Pro Leu Gly Lys Lys Ala Glu  
 20 25 30  
 Gly Ala Ser Ser Lys Ser Phe Leu Pro Gly Arg Ala Ser Ser Ala Ala  
 35 40 45  
 Pro Arg Thr

50

&lt;210&gt; 2325

&lt;211&gt; 459

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2325

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gatgagaacc gttttgtggc cgttaccagt tccaacgcag ctaagcttct gaacctgtat  
120  
ccccgcaagg gccgcattat tcccggagcc gatgctgatg tgggtggtgtg ggaccagaa  
180  
gccacaaaga ccatctcagc cagcacgcag gtccagggag gagacttcaa cctgtatgag  
240  
aacatgcgct gccacggcgt gccactggtc accatcagcc gggggcgcgct cgtgtatgag  
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360  
gacactgtct acaagaagct ggtccagaga gagaagactt taaaggtag aggagtggcc  
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cgcactccct acctggggga tgctgctgtt gtcgtgcac  
459

&lt;210&gt; 2326

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2326

Xaa Arg Val Gln Asp Arg Met Ser Ala Ile Trp Glu Arg Gly Val Val  
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Gly Gly Lys Met Asp Glu Asn Arg Phe Val Ala Val Thr Ser Ser Asn  
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Ala Ala Lys Leu Leu Asn Leu Tyr Pro Arg Lys Gly Arg Ile Ile Pro  
35 40 45  
Gly Ala Asp Ala Asp Val Val Val Trp Asp Pro Glu Ala Thr Lys Thr  
50 55 60  
Ile Ser Ala Ser Thr Gln Val Gln Gly Gly Asp Phe Asn Leu Tyr Glu  
65 70 75 80  
Asn Met Arg Cys His Gly Val Pro Leu Val Thr Ile Ser Arg Gly Arg  
85 90 95  
Val Val Tyr Glu Asn Gly Val Phe Met Cys Ala Glu Gly Thr Gly Lys  
100 105 110  
Phe Cys Pro Leu Arg Ser Phe Pro Asp Thr Val Tyr Lys Lys Leu Val  
115 120 125  
Gln Arg Glu Lys Thr Leu Lys Val Arg Gly Val Ala Arg Thr Pro Tyr  
130 135 140  
Leu Gly Asp Val Ala Val Val Val His  
145 150

&lt;210&gt; 2327

&lt;211&gt; 599

1700

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2327

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gcctttcctg tgggaaacgc cttctcatatc tatcagagca acagaggctt ccaggaagac  
120  
tcagagatcc gagcagctga gaagaaattt gggagcaaca aggccgagat ggtgggtgcct  
180  
gactttctcg agcttttcaa ggagagagcc acagccccct tctttgtatt tcaggtgttc  
240  
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420  
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599

&lt;210&gt; 2328

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2328

Glu	Phe	Gln	Lys	Ile	Lys	Tyr	Ser	Tyr	Asp	Ala	Leu	Glu	Lys	Lys	Gln
1			5						10					15	
Phe	Leu	Pro	Val	Ala	Phe	Pro	Val	Gly	Asn	Ala	Phe	Ser	Tyr	Tyr	Gln
			20					25					30		
Ser	Asn	Arg	Gly	Phe	Gln	Glu	Asp	Ser	Glu	Ile	Arg	Ala	Ala	Glu	Lys
			35				40					45			
Lys	Phe	Gly	Ser	Asn	Lys	Ala	Glu	Met	Val	Val	Pro	Asp	Phe	Ser	Glu
			50			55					60				
Leu	Phe	Lys	Glu	Arg	Ala	Thr	Ala	Pro	Phe	Phe	Val	Phe	Gln	Val	Phe
65					70					75				80	
Cys	Val	Gly	Leu	Trp	Cys	Leu	Asp	Glu	Tyr	Trp	Tyr	Tyr	Ser	Val	Phe
			85					90					95		
Thr	Leu	Ser	Met	Leu	Val	Ala	Phe	Glu	Ala	Ser	Leu	Val	Gln	Gln	Gln
			100					105					110		
Met	Arg	Asn	Met	Ser	Glu	Ile	Arg	Lys	Met	Gly	Asn	Lys	Pro	His	Met
		115					120					125			
Ile	Gln	Val	Tyr	Arg	Ser	Arg	Lys	Trp	Arg	Pro	Ile	Ala	Ser	Asp	Glu
		130				135				140					
Ile	Val	Pro	Gly	Asp	Ile	Val	Ser	Ile	Gly	Glu	Ala	Gly	Phe	Arg	Ser
145					150					155				160	
Val	Pro	Val	Gly	Ala	Pro	Ala	Ser	Gly	Pro	Leu	Ala	Asn	Pro	Pro	Ala
			165					170					175		
Ser	Ala	Leu	Gln	Ala	Ala	Pro	His	Arg	Arg	Thr	Trp	Cys	His	Val	Thr

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Cys Phe Cys Cys Glu Ala Ala  
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185

190

<210> 2329  
<211> 392  
<212> DNA  
<213> Homo sapiens

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240  
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300  
acgggtgatgt ggatgctcgg ggcattgggtg gtgctattcc tcgtgctttt cgtcatccag  
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aatctgcggc tgcacgccgc tcgcaaggat cc  
392

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<211> 90  
<212> PRT  
<213> Homo sapiens

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Phe Arg Leu Ala Val Gln Ala Phe Ile Val Val Val Ile Gly Gly Leu  
35 40 45  
Leu Trp Ala Leu Thr Ala Asp Ala Phe Gln Leu Ser Thr Val Met Trp  
50 55 60  
Met Leu Gly Ala Trp Val Val Leu Phe Leu Val Leu Phe Val Ile Gln  
65 70 75 80  
Asn Leu Arg Leu His Ala Ala Arg Lys Asp  
85 90

<210> 2331  
<211> 2813  
<212> DNA  
<213> Homo sapiens

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120

aaattttatc tattacaaag aactttaag ttgagaatat tggacctctt cctataactg  
180  
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240  
gggattcagt ttccccctgga cccaaacaca tcccgcgata tcagcattgt gttcactcca  
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1140  
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1200  
aactcacctc agtaccacca gccagacttg ccagaaattt ccaggaaaaa taatgggaat  
1260  
aaccagcaag tacctgtcaa gaatgaagta gatcattgtg aaaatttgaa gaagggtggac  
1320  
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1380  
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1440  
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1500  
aagaaaaggg gtgttgctcc agtctcaagg cctcctgaac agagtgatct aaagcttggtg  
1560  
tgcagtgact ttgagaggtc tgagctgagc agtgacatca atgtaagaag ctggtgtata  
1620  
caggaaagca ctagggaggt ttgtaaagca gatgccgaaa ttgcaagcag tttacctgct  
1680  
gcccagagag aggcagggtta ctaccagaag cctgagaaga aatgtgtgga caagttctgc  
1740

tccgattcca gctctgactg tgggagctcc tctggcagcg tgcgtgccag ccggggcagc  
 1800  
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 1920  
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 1980  
 tacgcagagc cttcctgtcc cagccttccct gccggggccca cagggtgttgaga agaagataaa  
 2040  
 ggtctttact cacctggaga cctgtggccc actccgccag tgtgtgtgac aagcagctta  
 2100  
 aactgcaccc tggagaacgg cgtgccttgt gtgattcagg agtcggcccc gggtcataat  
 2160  
 agtttcattg attggagtgc aacatgcgaa ggccagtttt ccagcgcata ctgtccattg  
 2220  
 gaattgaacg attacaatgc ctttccagaa gaaaacatga actatgccaa tggcttcccc  
 2280  
 tgtcctgcag atgttcagac agactttatt gatcacaact ctcagtctac ctggaacacc  
 2340  
 ccaccaaca tgctgtctgc ctggggacat gccagtttca tcagctctcc gccctacctc  
 2400  
 acaagcaccg gaagcttgct tccaatgtct ggactttttg gttccatctg ggccccgcaa  
 2460  
 agcgatgtgt atgaaaattg ctgccccatc aacccaccca cggaacattc gaccacatg  
 2520  
 gaaaaccaag cggtcgtgtg caaggaatac taccgggggt tcaaccggtt tcgcgcctat  
 2580  
 atgaacctgg acatatggac taccacagcg aataggaatg caaatttccc actgtctaga  
 2640  
 gactcgagtt actgtgggaa tgtgtgaaaa taattggatt tttaaacaat gtgaataaag  
 2700  
 aggcttgtgt tttgattact agtgtaaact ggttattgag atagattatg acattgggtg  
 2760  
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 2813

&lt;210&gt; 2332

&lt;211&gt; 789

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2332

Pro	Asp	Phe	Thr	Ser	Ser	Trp	Val	Ile	Arg	Asp	Leu	Ser	Leu	Val	Thr
1				5					10					15	
Ala	Ala	Asp	Leu	Glu	Phe	Arg	Phe	Thr	Leu	Asn	Val	Thr	Leu	Pro	His
			20					25					30		
His	Leu	Leu	Pro	Leu	Cys	Ala	Asp	Val	Val	Pro	Gly	Pro	Ser	Trp	Glu
			35				40					45			
Glu	Ser	Phe	Trp	Arg	Leu	Thr	Val	Phe	Phe	Val	Ser	Leu	Ser	Leu	Leu
			50			55					60				
Gly	Val	Ile	Leu	Ile	Ala	Phe	Gln	Gln	Ala	Gln	Tyr	Ile	Leu	Met	Glu
65					70				75					80	
Phe	Met	Lys	Thr	Arg	Gln	Arg	Gln	Asn	Ala	Ser	Ser	Ser	Ser	Gln	Gln



				85					90					95			
Asn	Asn	Gly	Pro	Met	Asp	Val	Ile	Ser	Pro	His	Ser	Tyr	Lys	Ser	Asn		
			100					105					110				
Cys	Lys	Asn	Phe	Leu	Asp	Thr	Tyr	Gly	Pro	Ser	Asp	Lys	Gly	Arg	Gly		
		115					120					125					
Lys	Asn	Cys	Leu	Pro	Val	Asn	Thr	Pro	Gln	Ser	Arg	Ile	Gln	Asn	Ala		
	130					135					140						
Ala	Lys	Arg	Ser	Pro	Ala	Thr	Tyr	Gly	His	Ser	Gln	Lys	Lys	His	Lys		
145					150					155					160		
Cys	Ser	Val	Tyr	Tyr	Ser	Lys	His	Lys	Thr	Ser	Thr	Ala	Ala	Ala	Ser		
			165					170							175		
Ser	Thr	Ser	Thr	Thr	Thr	Glu	Glu	Lys	Gln	Thr	Ser	Pro	Leu	Gly	Ser		
			180					185					190				
Ser	Leu	Pro	Ala	Ala	Lys	Glu	Asp	Ile	Cys	Thr	Asp	Ala	Met	Arg	Glu		
	195						200					205					
Asn	Trp	Ile	Ser	Leu	Arg	Tyr	Ala	Ser	Gly	Ile	Asn	Val	Asn	Leu	Gln		
	210					215					220						
Lys	Asn	Leu	Thr	Leu	Pro	Lys	Asn	Leu	Leu	Asn	Lys	Glu	Glu	Asn	Thr		
225					230					235					240		
Leu	Lys	Asn	Thr	Ile	Val	Phe	Ser	Asn	Pro	Ser	Ser	Glu	Cys	Ser	Met		
			245					250						255			
Lys	Glu	Gly	Ile	Gln	Thr	Cys	Met	Phe	Pro	Lys	Glu	Thr	Asp	Ile	Lys		
		260					265						270				
Thr	Ser	Glu	Asn	Thr	Ala	Glu	Phe	Lys	Glu	Arg	Glu	Leu	Cys	Pro	Leu		
	275					280						285					
Lys	Thr	Ser	Lys	Lys	Leu	Pro	Glu	Asn	His	Leu	Pro	Arg	Asn	Ser	Pro		
	290					295					300						
Gln	Tyr	His	Gln	Pro	Asp	Leu	Pro	Glu	Ile	Ser	Arg	Lys	Asn	Asn	Gly		
305					310					315					320		
Asn	Asn	Gln	Gln	Val	Pro	Val	Lys	Asn	Glu	Val	Asp	His	Cys	Glu	Asn		
			325					330						335			
Leu	Lys	Lys	Val	Asp	Thr	Lys	Pro	Ser	Ser	Glu	Lys	Lys	Ile	His	Lys		
		340						345					350				
Thr	Ser	Arg	Glu	Asp	Met	Phe	Ser	Glu	Lys	Gln	Asp	Ile	Pro	Phe	Val		
	355					360						365					
Glu	Gln	Glu	Asp	Pro	Tyr	Arg	Lys	Lys	Lys	Leu	Gln	Glu	Lys	Arg	Glu		
	370					375					380						
Gly	Asn	Leu	Gln	Asn	Leu	Asn	Trp	Ser	Lys	Ser	Arg	Thr	Cys	Arg	Lys		
385					390					395					400		
Asn	Lys	Lys	Arg	Gly	Val	Ala	Pro	Val	Ser	Arg	Pro	Pro	Glu	Gln	Ser		
			405					410						415			
Asp	Leu	Lys	Leu	Val	Cys	Ser	Asp	Phe	Glu	Arg	Ser	Glu	Leu	Ser	Ser		
		420						425					430				
Asp	Ile	Asn	Val	Arg	Ser	Trp	Cys	Ile	Gln	Glu	Ser	Thr	Arg	Glu	Val		
	435					440						445					
Cys	Lys	Ala	Asp	Ala	Glu	Ile	Ala	Ser	Ser	Leu	Pro	Ala	Ala	Gln	Arg		
	450					455					460						
Glu	Ala	Gly	Tyr	Tyr	Gln	Lys	Pro	Glu	Lys	Lys	Cys	Val	Asp	Lys	Phe		
465					470					475					480		
Cys	Ser	Asp	Ser	Ser	Ser	Asp	Cys	Gly	Ser	Ser	Ser	Gly	Ser	Val	Arg		
			485					490						495			
Ala	Ser	Arg	Gly	Ser	Trp	Gly	Ser	Trp	Ser	Ser	Thr	Ser	Ser	Ser	Asp		
		500						505					510				
Gly	Asp	Lys	Lys	Pro	Met	Val	Asp	Ala	Gln	His	Phe	Leu	Pro	Ala	Gly		

515	520	525
Asp Ser Val Ser Gln Asn Asp Phe Pro Ser Glu Ala Pro Ile Ser Leu		
530	535	540
Asn Leu Ser His Asn Ile Cys Asn Pro Met Thr Val Asn Ser Leu Pro		
545	550	555
Gln Tyr Ala Glu Pro Ser Cys Pro Ser Leu Pro Ala Gly Pro Thr Gly		
565	570	575
Val Glu Glu Asp Lys Gly Leu Tyr Ser Pro Gly Asp Leu Trp Pro Thr		
580	585	590
Pro Pro Val Cys Val Thr Ser Ser Leu Asn Cys Thr Leu Glu Asn Gly		
595	600	605
Val Pro Cys Val Ile Gln Glu Ser Ala Pro Val His Asn Ser Phe Ile		
610	615	620
Asp Trp Ser Ala Thr Cys Glu Gly Gln Phe Ser Ser Ala Tyr Cys Pro		
625	630	635
Leu Glu Leu Asn Asp Tyr Asn Ala Phe Pro Glu Glu Asn Met Asn Tyr		
645	650	655
Ala Asn Gly Phe Pro Cys Pro Ala Asp Val Gln Thr Asp Phe Ile Asp		
660	665	670
His Asn Ser Gln Ser Thr Trp Asn Thr Pro Pro Asn Met Pro Ala Ala		
675	680	685
Trp Gly His Ala Ser Phe Ile Ser Ser Pro Pro Tyr Leu Thr Ser Thr		
690	695	700
Arg Ser Leu Ser Pro Met Ser Gly Leu Phe Gly Ser Ile Trp Ala Pro		
705	710	715
Gln Ser Asp Val Tyr Glu Asn Cys Cys Pro Ile Asn Pro Thr Thr Glu		
725	730	735
His Ser Thr His Met Glu Asn Gln Ala Val Val Cys Lys Glu Tyr Tyr		
740	745	750
Pro Gly Phe Asn Pro Phe Arg Ala Tyr Met Asn Leu Asp Ile Trp Thr		
755	760	765
Thr Thr Ala Asn Arg Asn Ala Asn Phe Pro Leu Ser Arg Asp Ser Ser		
770	775	780
Tyr Cys Gly Asn Val		
785		

<210> 2333  
 <211> 501  
 <212> DNA  
 <213> Homo sapiens

<400> 2333  
 cgtatgattg gtgtgggaca aatactattc aacaagagta cctaaatcat tgtttaaggc  
 60  
 gaagtaataa atatgaatgg ggtgtatcat ataatgaaca acgaatatcc atatagtgc  
 120  
 gacgaagttc ttcacaaagc aaaatcatat ttgtcagcag atgaatatga gtatgtttta  
 180  
 aaaagctatc atattgctta tgaagcacat aaagggtcagt tccgaaaaaa cggattacca  
 240  
 tacattatgc atcctataca agttgcaggt attttaacag aaatgctgatt agacggaccg  
 300  
 acgattgtcg cagggtttttt gcatgatgta attgaagata caccgtatac atttgaagat  
 360

gtaaaagaaa tgttcaatga agaagttgct cgaattgttg atggtgtgac gaagcttaaa  
420  
aaaataaaaat accgctcaaa agaagaacaa caagctgaaa atcatcgcaa gttattttatt  
480  
gcgattgccca aagatgtacg c  
501

<210> 2334  
<211> 143  
<212> PRT  
<213> Homo sapiens

<400> 2334  
Met Asn Gly Val Tyr His Ile Met Asn Asn Glu Tyr Pro Tyr Ser Ala  
1 5 10 15  
Asp Glu Val Leu His Lys Ala Lys Ser Tyr Leu Ser Ala Asp Glu Tyr  
20 25 30  
Glu Tyr Val Leu Lys Ser Tyr His Ile Ala Tyr Glu Ala His Lys Gly  
35 40 45  
Gln Phe Arg Lys Asn Gly Leu Pro Tyr Ile Met His Pro Ile Gln Val  
50 55 60  
Ala Gly Ile Leu Thr Glu Met Arg Leu Asp Gly Pro Thr Ile Val Ala  
65 70 75 80  
Gly Phe Leu His Asp Val Ile Glu Asp Thr Pro Tyr Thr Phe Glu Asp  
85 90 95  
Val Lys Glu Met Phe Asn Glu Glu Val Ala Arg Ile Val Asp Gly Val  
100 105 110  
Thr Lys Leu Lys Lys Ile Lys Tyr Arg Ser Lys Glu Glu Gln Gln Ala  
115 120 125  
Glu Asn His Arg Lys Leu Phe Ile Ala Ile Ala Lys Asp Val Arg  
130 135 140

<210> 2335  
<211> 387  
<212> DNA  
<213> Homo sapiens

<400> 2335  
ggatcctgag cgtggggact tctttgcact ccacagaacc ctacttgta cctctacttt  
60  
tctctgcaga tggaccacac agcattcccc tgtggctgct gcagggaggg ctgtgagaac  
120  
cccatggggc gtgtggaatt taatcaggca agagttcaga cccatttcat ccacacactc  
180  
acccgcctgc agttggaaca ggaggctgag agcttttaggg agctggaggg ccctgcccag  
240  
ggcagcccac ccagccctgg tgaggaggcc ctggtcccta ctttcccact ggccaagccc  
300  
cccatgaaca atgagctggg agacaacagc tgcagcagcg acatgactga ttcttccaca  
360  
gcattttcat cagcatcggg cactagt  
387

<210> 2336

<211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 2336  
 Met Asp His Thr Ala Phe Pro Cys Gly Cys Cys Arg Glu Gly Cys Glu  
 1 5 10 15  
 Asn Pro Met Gly Arg Val Glu Phe Asn Gln Ala Arg Val Gln Thr His  
 20 25 30  
 Phe Ile His Thr Leu Thr Arg Leu Gln Leu Glu Gln Glu Ala Glu Ser  
 35 40 45  
 Phe Arg Glu Leu Glu Ala Pro Ala Gln Gly Ser Pro Pro Ser Pro Gly  
 50 55 60  
 Glu Glu Ala Leu Val Pro Thr Phe Pro Leu Ala Lys Pro Pro Met Asn  
 65 70 75 80  
 Asn Glu Leu Gly Asp Asn Ser Cys Ser Ser Asp Met Thr Asp Ser Ser  
 85 90 95  
 Thr Ala Ser Ser Ser Ala Ser Gly Thr Ser  
 100 105

<210> 2337  
 <211> 359  
 <212> DNA  
 <213> Homo sapiens

<400> 2337  
 ngagaagagg aggagtcac gccaggggcc gccatctcca gccctcgcca agccgctggg  
 60  
 accatgtgca gctcaagaat gccctcggc ccatcggcct cggggcaggg gaagggcagc  
 120  
 ttctctgcac cagcttcctt gctgggctcc agggcccaca ggctgaggcc gggggcccag  
 180  
 ggggtcaatgc caggcaccct gctattgagg aacctatcca ggaggaagga ctcgggcaga  
 240  
 cctgcgggat cctcgtcttc ccacgggtcc tcatggcaga agcagaagga gctggagtcg  
 300  
 ctgaggtccg tgggcaggcg ggctgggccc aacgtggggt caccgacctc ctcaaagct  
 359

<210> 2338  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 2338  
 Met Cys Ser Ser Arg Met Ala Ser Gly Pro Ser Ala Ser Gly Gln Gly  
 1 5 10 15  
 Lys Gly Ser Phe Ser Ala Pro Ala Ser Leu Leu Gly Ser Arg Ala His  
 20 25 30  
 Arg Leu Arg Pro Gly Ala Gln Gly Ser Met Pro Gly Thr Leu Leu Leu  
 35 40 45  
 Arg Asn Leu Ser Arg Arg Lys Asp Ser Gly Arg Pro Ala Gly Ser Ser  
 50 55 60  
 Ser Ser His Gly Ser Ser Trp Gln Lys Gln Lys Glu Leu Glu Ser Leu

```

65          70          75          80
Arg Ser Val Gly Arg Arg Ala Gly Pro Asn Val Gly Ser Pro Thr Ser
          85          90          95
Ser Lys

```

```
<210> 2339
<211> 439
<212> DNA
<213> Homo sapiens
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<400> 2339
acgcgtggcg tcagtccagg cagacttggg aggtcgccta caccgtcaac tcggttgcca
60
ccctgtcctc caccttcgtc gtcgcagtcg tcagtgtcct gtggtttgtg ccctccgggc
120
actggtcccc gtagggcttg taatgctggg gcgctcggcg cgatgtgcc a gttccttggg
180
gagttactcc tctacactgg tgtgaacaag accggagaat tccccccat attctcgttt
240
cccgcctcgtc ccgcacgtca ttgggactgg cttttacgcg gtagtggttg ccgtactctg
300
gttgctctgc ggcacggtcg gcagggggat catgtcatga gtccgacggg gagcgagcgg
360
cgtcttagcg cgccaatgcg acgtggcatc gtggcactgt gcgtggcgat ggcccttcgtg
420
ttgtcggggg gcggtgctg
439

```

```
<210> 2340
<211> 92
<212> PRT
<213> Homo sapiens
```

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<400> 2340
Met Cys Gln Phe Leu Gly Glu Leu Leu Leu Tyr Thr Gly Val Asn Lys
  1              5              10              15
Thr Gly Glu Phe Pro Pro Ile Phe Ser Phe Pro Ala Arg Pro Ala Arg
      20              25              30
His Trp Asp Trp Leu Leu Arg Gly Ser Gly Cys Arg Thr Leu Val Ala
      35              40              45
Leu Arg His Gly Arg Gln Gly Asp His Val Met Ser Pro Thr Val Ser
      50              55              60
Glu Arg Arg Leu Ser Ala Pro Met Arg Arg Gly Ile Val Ala Leu Cys
65              70              75              80
Val Ala Met Ala Phe Val Leu Ser Gly Cys Gly Ala
      85              90

```

```
<210> 2341
<211> 411
<212> DNA
<213> Homo sapiens
```

<400> 2341

gccaaacctc ccctccatcc tgcccaagat ggatcttgct gagcctccct ggcatatgcc  
60  
tctgcaggag gagccagagg aggtcacgga ggaggaggag gaaagggag aagaggagag  
120  
ggagaaggaa gcagaggagg aggaggaaga ggaagagctg ctctgtgag cgggtcccca  
180  
ggagccaccg cacaggccca tgcccttca cctagcacca gcagcagcac cagcagccag  
240  
agtcctgggg ccaccggga caggcaggag gattctggag accaggccac atcaggcnat  
300  
ggaagtggag agcagtgtga aaccacctt gtcagtgcc tcagtcaccc caagtacagt  
360  
ggccccgggg gttcagaact atagccagga gtctgggggc actgagtggc n  
411

<210> 2342  
<211> 113  
<212> PRT  
<213> Homo sapiens

<400> 2342  
Ala Ser Leu Ala Tyr Ala Ser Ala Gly Gly Ala Arg Gly Gly His Gly  
1 5 10 15  
Gly Gly Gly Gly Lys Gly Arg Arg Gly Glu Gly Glu Gly Ser Arg Gly  
20 25 30  
Gly Gly Gly Arg Gly Arg Ala Ala Pro Val Ser Gly Ser Pro Gly Ala  
35 40 45  
Thr Ala Gln Ala His Ala Pro Ser Pro Ser Thr Ser Ser Ser Thr Ser  
50 55 60  
Ser Gln Ser Pro Gly Ala Thr Arg His Arg Gln Glu Asp Ser Gly Asp  
65 70 75 80  
Gln Ala Thr Ser Gly Xaa Gly Ser Gly Glu Gln Cys Glu Thr His Leu  
85 90 95  
Val Ser Ala Leu Ser His Pro Lys Tyr Ser Gly Pro Gly Gly Ser Glu  
100 105 110  
Leu

<210> 2343  
<211> 522  
<212> DNA  
<213> Homo sapiens

<400> 2343  
ggcccgagc agatgctgat gccttcacag tttcccaacc agggccagca gggattctct  
60  
ggaggccagg gaccctacca agccatgtcc caggacatgg gcaataccca agacatgttc  
120  
agccctgac agagctcaat gcccatgagc aacgtgggca ccaccgggt cagccacatg  
180  
cctctgcccc ctgcgtccaa tctctctggg accgtgcatt cagccccaaa ccgggggcta  
240  
ggcaggcggc cttcggacct caccatcagt attaatacaga tgggctcacc gggcatgggg  
300

cacttgaagt cgcccaccct tagccaggtg cactcaccctc tggtcacctc gccctctgcc  
360  
aacctcaagt caccacagac tccctcacag atgggtgccct tgccttctgc caaccgcca  
420  
ggacctctca agtcgccccca ggtcctcggc tctcctctca gtgtccgttc acccactggc  
480  
tcgcccagca ggtcaagtc tcttccatg gcggtgcctt ct  
522

<210> 2344  
<211> 174  
<212> PRT  
<213> Homo sapiens

<400> 2344  
Gly Pro Gln Lys Met Leu Met Pro Ser Gln Phe Pro Asn Gln Gly Gln  
1 5 10 15  
Gln Gly Phe Ser Gly Gly Gln Gly Pro Tyr Gln Ala Met Ser Gln Asp  
20 25 30  
Met Gly Asn Thr Gln Asp Met Phe Ser Pro Asp Gln Ser Ser Met Pro  
35 40 45  
Met Ser Asn Val Gly Thr Thr Arg Leu Ser His Met Pro Leu Pro Pro  
50 55 60  
Ala Ser Asn Pro Pro Gly Thr Val His Ser Ala Pro Asn Arg Gly Leu  
65 70 75 80  
Gly Arg Arg Pro Ser Asp Leu Thr Ile Ser Ile Asn Gln Met Gly Ser  
85 90 95  
Pro Gly Met Gly His Leu Lys Ser Pro Thr Leu Ser Gln Val His Ser  
100 105 110  
Pro Leu Val Thr Ser Pro Ser Ala Asn Leu Lys Ser Pro Gln Thr Pro  
115 120 125  
Ser Gln Met Val Pro Leu Pro Ser Ala Asn Pro Pro Gly Pro Leu Lys  
130 135 140  
Ser Pro Gln Val Leu Gly Ser Ser Leu Ser Val Arg Ser Pro Thr Gly  
145 150 155 160  
Ser Pro Ser Arg Leu Lys Ser Pro Ser Met Ala Val Pro Ser  
165 170

<210> 2345  
<211> 561  
<212> DNA  
<213> Homo sapiens

<400> 2345  
nagatctccg tcttgatctt gagcaccgag gcactggggg gggaggacag cagccgcggg  
60  
ggcctccacc agcccgcgtc caggccgcct gggctcgacg cgctggacag gcgccggcgg  
120  
ctggcgctgc cgcccttttg ccgtttccgc cttttcttgc gcttctggtg cttgctggag  
180  
gcctgcgcgc ccgcctcgcc tgcgtgtcc gagtccttgg cgctgtcgga cgtgagtgac  
240  
tcgcagttct gcagccgcag gtccgactcg ctctccacca tagctattaa tgccaagaat  
300

gcaaatgaaa agaataatcat ctgggtgaat taccttctta gcaatcctga gtacaaggac  
360  
acacccatgg acatcgacaca gctcccccat ctgccggaga aaacttccga atcctcggag  
420  
acatccgact ctgagtcaga ctctaaagac acctcaggta ttacagagga caacgagaac  
480  
tccaagnntc cgacgagaag gggaaccagt ccgagaacag cgaagaccg gagcccgacc  
540  
ggaagaagtc gggcaacgcg t  
561

<210> 2346  
<211> 187  
<212> PRT  
<213> Homo sapiens

<400> 2346  
Xaa Ile Ser Val Leu Ile Leu Ser Thr Glu Ala Leu Gly Gly Glu Asp  
1 5 10 15  
Ser Ser Arg Gly Gly Leu His Gln Pro Ala Ser Arg Pro Pro Gly Leu  
20 25 30  
Asp Ala Leu Asp Arg Arg Arg Arg Leu Ala Leu Pro Pro Phe Cys Arg  
35 40 45  
Phe Arg Leu Phe Leu Arg Phe Trp Cys Leu Leu Glu Ala Cys Ala Pro  
50 55 60  
Ala Ser Pro Ala Leu Ser Glu Ser Leu Ala Leu Ser Asp Val Ser Asp  
65 70 75 80  
Ser Gln Phe Cys Ser Arg Arg Ser Asp Ser Leu Ser Thr Ile Ala Ile  
85 90 95  
Asn Ala Lys Asn Ala Asn Glu Lys Asn Ile Ile Trp Val Asn Tyr Leu  
100 105 110  
Leu Ser Asn Pro Glu Tyr Lys Asp Thr Pro Met Asp Ile Ala Gln Leu  
115 120 125  
Pro His Leu Pro Glu Lys Thr Ser Glu Ser Ser Glu Thr Ser Asp Ser  
130 135 140  
Glu Ser Asp Ser Lys Asp Thr Ser Gly Ile Thr Glu Asp Asn Glu Asn  
145 150 155 160  
Ser Lys Xaa Pro Thr Arg Arg Gly Thr Ser Pro Arg Thr Ala Lys Thr  
165 170 175  
Arg Ser Pro Thr Gly Arg Ser Arg Ala Thr Arg  
180 185

<210> 2347  
<211> 375  
<212> DNA  
<213> Homo sapiens

<400> 2347  
atcagcgaag aacacggcag gaccctggaa gacgccgccg gtgaattgaa gcgtgggtatc  
60  
gagaacgtcg agtacgctg cgccgcgccg gaagtactga aggggtgaata cagccgtaac  
120  
gtcgggtccga acatcgacgc ctggtccgat ttccagccgc tgggcgtggt ggcggggatc  
180



acgccattca acttcccggc gatggtgccc ctgtggatgt atccgttggc gatcgtttgc  
240  
ggtaactgct ttatcctcaa gccgtccgag cgtgatccga gctcgacctt gctgatcgcc  
300  
cagctgttgc aggaagccgg ttgccc aaa ggtgtgctga acgtggtgca tggtgacaag  
360  
accgcggtgg acgcg  
375

<210> 2348  
<211> 125  
<212> PRT  
<213> Homo sapiens

<400> 2348  
Ile Ser Glu Glu His Gly Arg Thr Leu Glu Asp Ala Ala Gly Glu Leu  
1 5 10 15  
Lys Arg Gly Ile Glu Asn Val Glu Tyr Ala Cys Ala Ala Pro Glu Val  
20 25 30  
Leu Lys Gly Glu Tyr Ser Arg Asn Val Gly Pro Asn Ile Asp Ala Trp  
35 40 45  
Ser Asp Phe Gln Pro Leu Gly Val Val Ala Gly Ile Thr Pro Phe Asn  
50 55 60  
Phe Pro Ala Met Val Pro Leu Trp Met Tyr Pro Leu Ala Ile Val Cys  
65 70 75 80  
Gly Asn Cys Phe Ile Leu Lys Pro Ser Glu Arg Asp Pro Ser Ser Thr  
85 90 95  
Leu Leu Ile Ala Gln Leu Leu Gln Glu Ala Gly Leu Pro Lys Gly Val  
100 105 110  
Leu Asn Val Val His Gly Asp Lys Thr Ala Val Asp Ala  
115 120 125

<210> 2349  
<211> 417  
<212> DNA  
<213> Homo sapiens

<400> 2349  
nnnaaaaaaa aaaaaaaa aaaaacacaa tatttaaatgg acgcggttta ttcagcaggt  
60  
gctgacaaag tttttggtgt cccaggagat tttaatctag cctttttaga tgatattatt  
120  
gcacataatc atattaaatg gattggtaat acaaatgaac ttaatgcaag ttatgccgct  
180  
gacggatatg cacgtattaa tggcatcggt gcaatggtaa caacatttgg agtgggtgaa  
240  
ttaagtgtg tcaacggaat cgctggatct tatgctgagc gtgtaccagt tattgccatc  
300  
actggggcac ctactcgagc tgtagaacia gaaggcaaat acgttcacca ttcccttggc  
360  
gaaggaactt ttgatgatta tagaaaaatg tttagaccta ttacaacagc gcaagct  
417

<210> 2350

<211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 2350  
 Xaa Lys Lys Lys Lys Lys Lys Lys Thr Gln Tyr Leu Met Asp Ala Val  
 1 5 10 15  
 Tyr Ser Ala Gly Ala Asp Lys Val Phe Gly Val Pro Gly Asp Phe Asn  
 20 25 30  
 Leu Ala Phe Leu Asp Asp Ile Ile Ala His Asn His Ile Lys Trp Ile  
 35 40 45  
 Gly Asn Thr Asn Glu Leu Asn Ala Ser Tyr Ala Ala Asp Gly Tyr Ala  
 50 55 60  
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&lt;211&gt; 1000

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<213> Homo sapiens

<400> 2359  
aacctgaaca tggtgggatt gagagagccc gaggtgtatg ggtcggaaac attggccgac  
60  
gttgagcaga cgtgtcgtga gtacggcgaa gaacttgggc ttgtaattga gtttcagcaa  
120  
accaatcacg aaggggcaaat gattgaatgg attcaccacg cccgtagaag gattgcgggg  
180  
attgtgatca atccaggagc atggacccat acatcggcag ccaccacga tgcgttgatt  
240  
gcagccgagg taccggtgat tgagggtcac atctcaaattg tccacaggcg tgaagatttc  
300  
aggcattttt cctacgtgtc acgc  
324

<210> 2360  
<211> 108  
<212> PRT  
<213> Homo sapiens

<400> 2360  
Asn Leu Asn Met Leu Gly Leu Arg Glu Pro Glu Val Tyr Gly Ser Glu  
1 5 10 15  
Thr Leu Ala Asp Val Glu Gln Thr Cys Arg Glu Tyr Gly Glu Glu Leu  
20 25 30  
Gly Leu Val Ile Glu Phe Gln Gln Thr Asn His Glu Gly Gln Met Ile  
35 40 45  
Glu Trp Ile His His Ala Arg Arg Arg Ile Ala Gly Ile Val Ile Asn  
50 55 60  
Pro Gly Ala Trp Thr His Thr Ser Ala Ala Ile His Asp Ala Leu Ile  
65 70 75 80  
Ala Ala Glu Val Pro Val Ile Glu Val His Ile Ser Asn Val His Arg  
85 90 95  
Arg Glu Asp Phe Arg His Phe Ser Tyr Val Ser Arg  
100 105

<210> 2361  
<211> 398  
<212> DNA  
<213> Homo sapiens

<400> 2361

tccggatggg actccaacct acttgggggt actgggggtg cagaaagaac gcggccctgt  
 60  
 gtcagggacc ggtatggaag cctcagtagg gctggagccc catcatgccc cttccgagca  
 120  
 gatcaacaca gaccagctgg tcaaggggga cctccatccc tgccctgtcc tcacggagct  
 180  
 gtagggagag tcccaaaggc aggtgggtggg gctggggcct ccaacagctg ggtcctctca  
 240  
 tatcacttaa ggcccaacag cacacagtct cccaagtgtg ccaggtgcca caacacggcc  
 300  
 atcccgtctt cacagctcca ccccgctgc ctgctgcca ccctctccac aaacatatgc  
 360  
 tgcagctcca caccgggaa acaccacatg ctgccttt  
 398

<210> 2362

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2362

Met	Pro	Leu	Pro	Ser	Arg	Ser	Thr	Gln	Thr	Ser	Trp	Ser	Arg	Gly	Thr
1			5					10						15	
Ser	Ile	Pro	Ala	Leu	Ser	Ser	Arg	Ser	Cys	Arg	Glu	Ser	Pro	Lys	Gly
		20					25						30		
Arg	Trp	Trp	Gly	Trp	Gly	Leu	Gln	Gln	Leu	Gly	Pro	Leu	Ile	Ser	Leu
		35				40						45			
Lys	Ala	Gln	Gln	His	Thr	Val	Ser	Gln	Val	Cys	Gln	Val	Pro	Gln	His
	50					55					60				
Gly	His	Pro	Ala	Leu	Thr	Ala	Pro	Pro	Arg	Leu	Pro	Ala	Cys	His	His
65				70					75					80	
Leu	His	Lys	His	Met	Leu	Gln	Leu	His	Thr	Arg	Glu	Thr	Pro	His	Ala
			85						90					95	

Arg Phe

<210> 2363

<211> 833

<212> DNA

<213> Homo sapiens

<400> 2363

nngactcctc tagctcccaa cgcaaaagcg tttaaagatg cagctcagaa gcatcaccag  
 60  
 cagcacaagg ggaggtecca agaaccagaa cttacatcac tgcctccgag ttcagagggt  
 120  
 tcctttccca ccttctcaga actttctgtt tccatggcct cctctgccac ctctgccacc  
 180  
 tcccctgatg tgctggcctc cgtttccatc gcttctcat ggcgttcttc cgcccgggtg  
 240  
 tccaagccca ctgcangtcg aagcaaagct gattgctgta ccactcagaa ggtggcacag  
 300  
 ggactggcag cggtgccatc tgggagtctg tgtgctcagc ctccgagtgc aggtttcccc  
 360

ggccccctgct gtggtgctag gtccccagat gagagatcac ggcatgaag atcagcccc  
420  
aaggcagccc cttcenttcc agcctgggct ctggcgtgtt ctaggtgctc acttccatgg  
480  
ctggcctgct cacagagccc tacctcagcc tgtggttaagc gcacctgctc ggccctgggtg  
540  
ctctatgatg agccaccagt cagttctgca gatgtgtccc cgagctcctg ccgagggacg  
600  
aaacacgggtg gccctgctcc tagtgccctgt gcacgccacg ctccacacct gccatctgcc  
660  
cttccaccac ctgctccccc agggggtccg cctcgtgact cacgctcagg caagtctccg  
720  
ggcgcgaaca gctggctgat ggtgacatgc tgcagcctgg tcacatcaga aaccatgagg  
780  
gtggatctcc ggaggtcatc gatgtggaca gactgccaca gcccttcacg cgt  
833

<210> 2364  
<211> 135  
<212> PRT  
<213> Homo sapiens

<400> 2364  
Xaa Thr Pro Leu Ala Pro Asn Ala Lys Ala Phe Lys Asp Ala Ala Gln  
1 5 10 15  
Lys His His Gln Gln His Lys Gly Arg Ser Gln Glu Pro Glu Leu Thr  
20 25 30  
Ser Leu Pro Pro Ser Ser Glu Val Ser Phe Pro Thr Phe Ser Glu Leu  
35 40 45  
Ser Val Ser Met Ala Ser Ser Ala Thr Ser Ala Thr Ser Pro Asp Val  
50 55 60  
Leu Ala Ser Val Ser Ile Ala Ser Ser Trp Arg Ser Ser Ala Arg Cys  
65 70 75 80  
Ser Lys Pro Thr Ala Xaa Arg Ser Lys Arg Asp Cys Val Thr Thr Gln  
85 90 95  
Lys Val Ala Gln Gly Leu Ala Ala Val Pro Ser Gly Ser Leu Cys Ala  
100 105 110  
Gln Pro Pro Ser Ala Gly Phe Pro Gly Pro Cys Cys Gly Ala Arg Ser  
115 120 125  
Pro Asp Glu Arg Ser Arg Ser  
130 135

<210> 2365  
<211> 429  
<212> DNA  
<213> Homo sapiens

<400> 2365  
accggtgccc agctcccacg gctcgtccag acctacgttg agaaacttcg acgagacagt  
60  
ctccgtcagt tcgccaaca acctctgaac gaagtcaaga ttctccggca ctggagccaa  
120  
ggtgcttgcc ctggcatgaa cgccccaggg gaggtcgacg ccgtcgggat tctcacaccg  
180

atggtgatgg gactcggttt ccaaccacgg ttccatgtga cccagacagt tctggttggc  
240  
cccgagctcg atgcctcgtc cgcgacacag accatcgagc cacctcatgt cctccgccgt  
300  
cacggggctg cggtcggccc acacctcctc ctcaccgagg taggcaaata ccgcttcacc  
360  
atagagctca aggtgattga gaccacaccg cgccatgacg cgcgtcagga aatcaagagt  
420  
ggaacgcgt  
429

<210> 2366  
<211> 132  
<212> PRT  
<213> Homo sapiens

<400> 2366  
Met Ala Arg Cys Gly Leu Asn His Leu Glu Leu Tyr Gly Glu Ala Gly  
1 5 10 15  
Phe Ala Tyr Arg Gly Glu Glu Glu Val Trp Ala Asp Arg Ser Pro Val  
20 25 30  
Thr Ala Glu Asp Met Arg Trp Leu Asp Gly Leu Cys Arg Gly Arg Gly  
35 40 45  
Ile Glu Leu Gly Ala Asn Gln Asn Cys Leu Gly His Met Glu Pro Trp  
50 55 60  
Leu Glu Thr Glu Ser His His His Arg Cys Glu Asn Pro Asp Gly Val  
65 70 75 80  
Asp Leu Pro Trp Gly Val His Ala Arg Ala Ser Thr Leu Ala Pro Val  
85 90 95  
Pro Glu Asn Leu Asp Phe Val Gln Arg Leu Leu Gly Glu Leu Thr Glu  
100 105 110  
Thr Val Ser Ser Lys Phe Leu Asn Val Gly Leu Asp Glu Pro Trp Glu  
115 120 125  
Leu Gly Thr Gly  
130

<210> 2367  
<211> 474  
<212> DNA  
<213> Homo sapiens

<400> 2367  
ngtgcacggg agaagacgtg cgcgcagttc ggcggaacct atccgggttc ggccggcagt  
60  
gggggtcacg agctcaccga cgcgcgcgcg ttgcctcgt ggggcgtcga tttcgtcaaa  
120  
tacgatcggg gctccggtga ctccgcgcac gacgaccagg tcgcctcgtt caccgcgatg  
180  
cgtgacgcaa tccgatccac cggacgcccc atggtgtaca gcatcaaccc caacagcgaa  
240  
tcgccggatc ggtccggagc ccaattcgat tggggcggtg tggcaaccat gacacgtacc  
300  
accaacgaca tctcgcgggt gtggaccact cggccggcgc gtgccgatgc gacaccggca  
360

tccgggtatc aggggatccg cgacatcatc gacgccgtgg ccccgatcgg cgcacggggtt  
420  
gcgacggcag ctctgtcgac atggacatgc tcgtcgtcgg tgtcggcaac gcgt  
474

<210> 2368  
<211> 158  
<212> PRT  
<213> Homo sapiens

<400> 2368  
Xaa Ala Arg Glu Lys Thr Cys Ala Gln Phe Gly Gly Thr Tyr Pro Gly  
1 5 10 15  
Ser Ala Gly Ser Gly Gly His Glu Leu Thr Asp Ala Arg Ala Phe Ala  
20 25 30  
Ser Trp Gly Val Asp Phe Val Lys Tyr Asp Arg Cys Ser Gly Asp Ser  
35 40 45  
Ala His Asp Asp Gln Val Ala Ser Phe Thr Ala Met Arg Asp Ala Ile  
50 55 60  
Arg Ser Thr Gly Arg Pro Met Val Tyr Ser Ile Asn Pro Asn Ser Glu  
65 70 75 80  
Ser Pro Asp Arg Ser Gly Ala Gln Phe Asp Trp Gly Gly Val Ala Thr  
85 90 95  
Met Thr Arg Thr Thr Asn Asp Ile Ser Pro Val Trp Thr Thr Arg Pro  
100 105 110  
Ala Gly Ala Asp Ala Thr Pro Ala Ser Gly Tyr Gln Gly Ile Arg Asp  
115 120 125  
Ile Ile Asp Ala Val Ala Pro Ile Gly Ala Arg Val Ala Thr Ala Ala  
130 135 140  
Ser Ser Thr Trp Thr Cys Ser Ser Ser Val Ser Ala Thr Arg  
145 150 155

<210> 2369  
<211> 408  
<212> DNA  
<213> Homo sapiens

<400> 2369  
ctgaatggca ggcaggcaga ggccaccaga gccagccccc cgagaagccc tgctgagcca  
60  
aaggggagcg ccctgggacc taacccagag ccccatctca ccttcccccg ttctttcaaa  
120  
gtgcctcccc caacccagct caggacttcg tccatcccag ttcaggaagc acaagaggct  
180  
cccgaaagga agagggggcc accaagaagg ctcccagccg actcccactg cctcccagct  
240  
tccacatccg ccccgctcc caggtctacc cagacagggc ccccgagenc agactgcctt  
300  
ggggagctca aggccacagc accagccagc ccaaggcttg gccagtcca gtccaagca  
360  
gatgaacgag ctgggactcc gcctccagcc cctccccctgc cccctcct  
408

<210> 2370

<211> 136  
 <212> PRT  
 <213> Homo sapiens

<400> 2370  
 Leu Asn Gly Arg Gln Ala Glu Ala Thr Arg Ala Ser Pro Pro Arg Ser  
 1 5 10 15  
 Pro Ala Glu Pro Lys Gly Ser Ala Leu Gly Pro Asn Pro Glu Pro His  
 20 25 30  
 Leu Thr Phe Pro Arg Ser Phe Lys Val Pro Pro Pro Thr Pro Val Arg  
 35 40 45  
 Thr Ser Ser Ile Pro Val Gln Glu Ala Gln Glu Ala Pro Glu Arg Lys  
 50 55 60  
 Arg Gly Pro Pro Arg Arg Leu Pro Ala Asp Ser His Cys Leu Pro Ala  
 65 70 75 80  
 Ser Thr Ser Ala Pro Pro Pro Arg Ser Thr Gln Thr Gly Pro Pro Ser  
 85 90 95  
 Xaa Asp Cys Pro Gly Glu Leu Lys Ala Thr Ala Pro Ala Ser Pro Arg  
 100 105 110  
 Leu Gly Gln Ser Gln Ser Gln Ala Asp Glu Arg Ala Gly Thr Pro Pro  
 115 120 125  
 Pro Ala Pro Pro Leu Pro Pro Pro  
 130 135

<210> 2371  
 <211> 327  
 <212> DNA  
 <213> Homo sapiens

<400> 2371  
 gaattcgggtg tgcgatgcga gcctgcagcc tgggagcaga gacaaggagc aaaggcgggtg  
 60  
 agagggttgc cagggcaccc agttacagct ggagctgcag gggacccatc cctcgagaga  
 120  
 ggcaggcact agtcatgagg caagagatgc ctcagaagag gatgctggcc gcagggcaca  
 180  
 gcagagaggg agatagcccg gggcactcct caggaccggg cctcagggga cagcaaaca  
 240  
 gattcctgat agacgcgccc aggtcatgcc ttttcagtgg tgtgagccag gttctggcgt  
 300  
 caggcgggccc aagggtttca tgcagcn  
 327

<210> 2372  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 2372  
 Met Arg Ala Cys Ser Leu Gly Ala Glu Thr Arg Ser Lys Gly Gly Glu  
 1 5 10 15  
 Arg Val Ala Arg Ala Pro Ser Tyr Ser Trp Ser Cys Arg Gly Pro Ile  
 20 25 30  
 Pro Arg Glu Arg Gln Ala Leu Val Met Arg Gln Glu Met Pro Gln Lys



35 40 45  
 Arg Met Leu Ala Ala Gly His Ser Arg Glu Gly Asp Ser Pro Gly His  
 50 55 60  
 Ser Ser Gly Pro Gly Leu Arg Gly Gln Gln Thr Arg Phe Leu Ile Asp  
 65 70 75 80  
 Ala Pro Arg Ser Cys Leu Phe Ser Gly Val Ser Gln Val Leu Ala Ser  
 85 90 95  
 Gly Gly Pro Arg Phe Ser Cys Ser  
 100

<210> 2373  
 <211> 591  
 <212> DNA  
 <213> Homo sapiens

<400> 2373  
 gaattctgac attcaggaag tcaattgcag aagggttaac caagttgatt ctgttttacc  
 60  
 aaatcctgtc tattctgaaa agcggccaat gccagactca tctcatgatg tgaaagttct  
 120  
 cacttcaaag acatcagctg ttgagatgac ccaggcagta ttgaatactc agctttcatc  
 180  
 agaaaatggt accaaagtgt agcaaaattc accagcagtt tgtgaaacaa tttctgttcc  
 240  
 caagtccatg tccactgagg aatataaatc aaaaattcaa aatgaaaata tgctacttct  
 300  
 cgctttgctt tcacaggcac gtaagactca gaagacagta ttaaagatg ctaatcaaac  
 360  
 tattcaggat tctaaaccag acagttgtga aatgaatcca aatacccaa tgactggtaa  
 420  
 ccaactgaat ttgaagaaca tggaaactcc aagtacttct aatgtaagtg gcagggtttt  
 480  
 ggacaactcc ttttgcagtg gacaagaatc ctcaacaaaa ggaatgcctg ctaaaagtga  
 540  
 cagtagctgt tccatggaag tgctagcaac ctgtctttcc ctgtggaaaa a  
 591

<210> 2374  
 <211> 167  
 <212> PRT  
 <213> Homo sapiens

<400> 2374  
 Met Pro Asp Ser Ser His Asp Val Lys Val Leu Thr Ser Lys Thr Ser  
 1 5 10 15  
 Ala Val Glu Met Thr Gln Ala Val Leu Asn Thr Gln Leu Ser Ser Glu  
 20 25 30  
 Asn Val Thr Lys Val Glu Gln Asn Ser Pro Ala Val Cys Glu Thr Ile  
 35 40 45  
 Ser Val Pro Lys Ser Met Ser Thr Glu Glu Tyr Lys Ser Lys Ile Gln  
 50 55 60  
 Asn Glu Asn Met Leu Leu Leu Ala Leu Leu Ser Gln Ala Arg Lys Thr  
 65 70 75 80  
 Gln Lys Thr Val Leu Lys Asp Ala Asn Gln Thr Ile Gln Asp Ser Lys

<400> 2376															
Xaa	Ala	Met	Ser	Leu	Leu	Ser	Ser	Gly	Thr	Leu	Asp	Ser	Tyr	Leu	Glu
1				5					10					15	
Arg	His	Lys	Gln	Leu	Asp	Ala	Met	Arg	Met	Leu	His	Phe	Phe	Ala	Leu
			20					25					30		
Asp	Glu	Glu	Asn	Pro	Ala	Ser	Ile	Tyr	Asn	Cys	Leu	Arg	Ala	Ala	Arg
		35					40					45			
Gly	Asn	Ala	His	Ala	Val	Arg	Gly	Arg	Ile	Thr	Ala	Asp	Met	Trp	Glu
	50					55					60				
Asn	Leu	Asn	Ala	Thr	Trp	Leu	Glu	Met	Arg	Ser	Ile	Ala	Ala	Gly	Gly
65					70					75				80	
Leu	Ala	Arg	His	Gly	Ile	Ser	His	Phe	Cys	Asp	Trp	Val	Lys	Gln	Arg

			85				90				95				
Ser	His	Leu	Phe	Arg	Gly	Ala	Thr	Ser	Gly	Thr	Ile	Met	Arg	Asn	Asp
			100					105					110		
Ala	Tyr	Arg	Phe	Ile	Arg	Leu	Gly	Thr	Phe	Val	Glu	Arg	Ala	Asp	Asn
		115					120					125			
Thr	Leu	Arg	Leu	Leu	Asp	Ala	Arg	Tyr	Glu	Met	Phe	Gly	Glu	Glu	Ser
	130					135					140				
Glu	Glu	Val	Ser	Asp	Leu	Ser	Ala	Arg	Gly	Tyr	Tyr	Gln	Trp	Ser	Ala
145					150					155				160	
Leu	Leu	Arg	Ala	Leu	Ser	Ser	Phe	Glu	Ala	Tyr	Thr	Glu	Leu	Tyr	Pro
			165					170					175		
Asn	Ala														

<210> 2377  
 <211> 622  
 <212> DNA  
 <213> Homo sapiens

<400> 2377  
 acgcgtgaag gggtgaggct tcagaagtgg tagggaagaa cagaagctcc cttctgaggg  
 60  
 agcaccagg agatgaaagg aaccaatcct ggggtggcct gcaccaggct tatcaacccc  
 120  
 tgacagacaa atggaaaact tctgtgatgg tgggacatga aaaaatattt cacccttctg  
 180  
 ataaaatgga accagcagat agaagtagga atttttctgt taggtgaaat gtttttaaaa  
 240  
 atatgtatac aggaaaaagc ataaaacagt attgactggc aaacatagaa ctggaatgta  
 300  
 aatataatgt tctttgccct gaatgattta agtggcatga taaaactcat gccacagact  
 360  
 gggtaagaca aggaatctaa tccactctaa aaagaagaaa agcatagtaa aattctcctt  
 420  
 agagttagaa ttattaatag ttcctatcta ctatttaatt taatcatagt taatgatgag  
 480  
 aatttcttaa atttaaagct tctgatgatg ctaaagtgc atttctcatg attccttaaa  
 540  
 acaatttttg taaattctat tctaggacc ttctgcttcc agaaaaatta atgtcttgta  
 600  
 ttcttcgtat tggaggagat ct  
 622

<210> 2378  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 2378  
 Met Ser Phe Ile Met Pro Leu Lys Ser Phe Arg Ala Lys Asn Ile Ile  
 1 5 10 15  
 Phe Thr Phe Gln Phe Tyr Val Cys Gln Ser Ile Leu Phe Tyr Ala Phe  
 20 25 30  
 Ser Cys Ile His Ile Phe Lys Asn Ile Ser Pro Asn Arg Lys Ile Pro

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<210> 2379
<211> 342
<212> DNA
<213> Homo sapiens
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<400> 2379
tcatgacctg gagacttcgg aaactcaaca agactgcagg gcaccagccc
60
cggtcaccgc agaggatcag tgcactttgc catctggcag atcaactcat ggcacaactg
120
ggaaacataa cattcacgct tgtgaaccga gacgccatac cccagcgggtg ccgagagcaa
180
cagtgtgtgt caggtctggg cagatgaggg cctccaggac acgaggactc actcgctcac
240
cctgcccact gggcagctgc tcgccactcc cctcctggag ggcaggacgg acaccacaca
300
cacacacaag cagggaaagct gtgcagcagt ggggagaaaag ca
342

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<210> 2380
<211> 113
<212> PRT
<213> Homo sapiens
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<400> 2380
Met Thr Trp Arg Leu Arg Lys Leu Asn Lys Thr Ala Gly His Pro Gly
 1                    5                10                15
Ala Pro Ala Pro Val Thr Ala Glu Asp Gln Cys Thr Leu Pro Ser Gly
                20                25                30
Arg Ser Thr His Gly Thr Thr Gly Lys His Asn Ile His Ala Cys Glu
                35                40                45
Pro Arg Arg His Thr Pro Ala Val Pro Arg Ala Thr Val Leu Cys Arg
    50                55                60
Ser Gly Gln Met Arg Ala Ser Arg Thr Arg Gly Leu Thr Arg Ser Pro
65                70                75                80
Cys Pro Leu Gly Ser Cys Ser Pro Leu Pro Ser Trp Arg Ala Gly Arg
                85                90                95
Thr Pro His Thr His Thr Ser Arg Glu Ala Val Gln Gln Trp Gly Glu
                100                105                110
Ser

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<210> 2381  
<211> 434

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2381

gtgcaccctg gccatatgga cgccagcgac gtcggcgtct tgcgtgacgt ggaaccgatc  
60  
ggcccaagta gagagatgga ttttgaatgg tgacgatgta cccgccgcag caagtggatg  
120  
ccgtcctctt tgacatggac ggaaccctgc tcaacaccct gccggcctgg tgcgtggcat  
180  
ctgagcatct gtggggcact tctctggctg acgctgacag cgccaagggt gacgggggca  
240  
ccgtcgacga cgtcgttgag ctgtatctgc gagaccaccc tcaggcagat ccccaggcca  
300  
ccatcgagcg tttcatggac atccttgacg ccaacctggc tggccacacc gagccgatgc  
360  
ccggagctga ccgcctcgtg aagaggctgt caggctcatgt acccatcgct gtggtgtcga  
420  
attccccgac gcgt  
434

&lt;210&gt; 2382

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2382

Met	Val	Thr	Met	Tyr	Pro	Pro	Gln	Gln	Val	Asp	Ala	Val	Leu	Phe	Asp
1			5					10					15		
Met	Asp	Gly	Thr	Leu	Leu	Asn	Thr	Leu	Pro	Ala	Trp	Cys	Val	Ala	Ser
		20					25					30			
Glu	His	Leu	Trp	Gly	Thr	Ser	Leu	Ala	Asp	Ala	Asp	Ser	Ala	Lys	Val
	35				40						45				
Asp	Gly	Gly	Thr	Val	Asp	Asp	Val	Val	Glu	Leu	Tyr	Leu	Arg	Asp	His
	50				55					60					
Pro	Gln	Ala	Asp	Pro	Gln	Ala	Thr	Ile	Glu	Arg	Phe	Met	Asp	Ile	Leu
65			70					75					80		
Asp	Ala	Asn	Leu	Ala	Gly	His	Thr	Glu	Pro	Met	Pro	Gly	Ala	Asp	Arg
		85					90					95			
Leu	Val	Lys	Arg	Leu	Ser	Gly	His	Val	Pro	Ile	Ala	Val	Val	Ser	Asn
	100					105						110			
Ser	Pro	Thr	Arg												
	115														

&lt;210&gt; 2383

&lt;211&gt; 393

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2383

acgcgtgcgt tcagatgagc gccggacgaa actcctcggc cgttcggca ggcattggatt  
60  
catgtcggca cgggcctttg aacaggatcg ccgtcgcgtg gctatccgcc gcgggtgggg  
120

cagaaaacgc ccactctccc ttccccaggc gccggccgtc gagtcgtcta cgcaacgcac  
180  
gtctacatag gtgacttttt cataccccca ctttcgtact cggatggggt cggcgtgctc  
240  
gatgtcggca cgaaaaatta aatgcactga atgcgggttg tcgcacagga tgcattctgt  
300  
ctttcttgat gccaccacc ttgttacata ttctgccatg caaaacacct tgtgattttt  
360  
ggcggagtgc aacatgggtat gtgtatgcca ctg  
393

<210> 2384  
<211> 125  
<212> PRT  
<213> Homo sapiens

<400> 2384  
Met Leu His Ser Ala Lys Asn His Lys Val Phe Cys Met Ala Glu Tyr  
1 5 10 15  
Val Thr Arg Trp Val Ala Ser Arg Lys Thr Arg Cys Ile Leu Cys Asp  
20 25 30  
Asn Pro His Ser Val His Leu Ile Phe Arg Ala Asp Ile Glu His Ala  
35 40 45  
Glu Pro Ile Arg Val Arg Lys Trp Gly Tyr Glu Lys Val Thr Tyr Val  
50 55 60  
Asp Val Arg Cys Val Asp Asp Ser Thr Ala Gly Ala Trp Gly Arg Glu  
65 70 75 80  
Ser Gly Arg Phe Leu Pro His Pro Arg Arg Ile Ala Thr Arg Arg Arg  
85 90 95  
Ser Cys Ser Lys Ala Arg Ala Asp Met Asn Pro Cys Leu Pro Lys Arg  
100 105 110  
Pro Arg Ser Phe Val Arg Arg Ser Ser Glu Arg Thr Arg  
115 120 125

<210> 2385  
<211> 347  
<212> DNA  
<213> Homo sapiens

<400> 2385  
acgcgttccc aaagtaggat ggctgggata gagggaaaagg acatctttca ggcttggtat  
60  
gcactgtgct gtggactctt gttgtgggggt cctaggtctg cccagcattt tgggggtcac  
120  
cccgtgacct tctacgggtt tccatgcccc cagcaccacg tccatcatca tttctgggggt  
180  
ccctcacct cagagagcct gcttcctatg actgcgtggg ccagctggag aaggacgacc  
240  
caagaccct caagtttctg tgcctgacc ccaagcatag gcctgagtgc tcctggggcc  
300  
caagggcctt tacgcactac tctctggggc ccactgtctg cactctt  
347

<210> 2386

<211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 2386  
 Met Ala Gly Ile Glu Gly Lys Asp Ile Phe Gln Ala Cys Tyr Ala Leu  
 1 5 10 15  
 Cys Cys Gly Leu Leu Leu Trp Gly Pro Arg Ser Ala Gln His Phe Gly  
 20 25 30  
 Val His Pro Val Thr Leu Tyr Gly Phe Pro Cys Pro Gln His His Val  
 35 40 45  
 His His His Phe Trp Gly Pro Leu Thr Ser Glu Ser Leu Leu Pro Met  
 50 55 60  
 Thr Ala Trp Ala Ser Trp Arg Arg Thr Thr Gln Asp Pro Ser Ser Phe  
 65 70 75 80  
 Cys Val Leu Thr Pro Ser Ile Gly Leu Ser Ala Pro Gly Ala Gln Gly  
 85 90 95  
 Pro Leu Arg Thr Thr Leu Trp Gly Pro Leu Ser Ala Leu  
 100 105

<210> 2387  
 <211> 715  
 <212> DNA  
 <213> Homo sapiens

<400> 2387  
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 60  
 cgccggagac agctgccgcc gcatagtaat caccgcggg ctgggtgcgc gggggctccc  
 120  
 cgctacctgc gcgcctgctg ctcccaccac gcggcaccga cccgggcgcg ccccgggccc  
 180  
 ctgtccgcag cccacagcca caccgcgcac cctacacct ccttgccgct ctgctgggga  
 240  
 gctcaccccc tccactcgca cagtgcgctg cggcccgggg tgtgggaggt cccgggactt  
 300  
 ggggtgtgag tgcctgtgtg ggggtagggg caggtgtccg cttgtgcgca tatgggcatg  
 360  
 agtgtacatg gcgtgtgcct ggagatgggc gagtgcaggc tggaatgtgc cggcgtggca  
 420  
 cgtgtgtggg cccaaataga tgcgtgtgtg atcacatgtt gtgttcgtgt ttgcacctcg  
 480  
 tgtgcctgtg tgtccgtatt tgagtgttta caggaatgtg ggtggtagt acccgatatg  
 540  
 ggggtgcatct gcacttgtgc gtgtgtgtgt gtaggcgcgt gtgtgtgcgt gtgtgtgtta  
 600  
 ngggatacgt gtagatgtgc attagtgtga ctgtgtgtgc tcatgtgcct gtgcacgtgt  
 660  
 gtttgagggt tgtgtgcatg ggtagcgtct gtgagagcca tgtgtatatc tgcag  
 715

<210> 2388  
 <211> 58  
 <212> PRT

<213> Homo sapiens

<400> 2388

Met Gly Met Ser Val His Gly Val Cys Leu Glu Met Gly Glu Cys Arg  
1 5 10 15  
Leu Glu Cys Ala Gly Val Ala Arg Val Trp Ala Gln Ile Asp Ala Cys  
20 25 30  
Val Ile Thr Cys Cys Val Arg Val Cys Thr Ser Cys Ala Cys Val Ser  
35 40 45  
Val Phe Glu Cys Leu Gln Glu Cys Gly Trp  
50 55

<210> 2389

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2389

ntcaccctgc cgccggaagg ttgctcgtag cgcatggcca tcgtcacat gaagaagtcg  
60  
tatccggggcc acgccaagcg cgtcatgttg ggtgtctggt cgtttttgcg acagttcatg  
120  
tataccaagt tcgttatcgt caccgacgac gatatacaacg cccgcgactg gaacgacgtg  
180  
atctggggcca tcaccacgcg catggacccc aagcgcgaca cggatgatgat cgataacacg  
240  
ccgatcgact acctcgactt cgctcgccg gtgtccggcc tgggttcgaa gatggggctc  
300  
gatccacgc acaaatggcc cggccacacc acccgn  
336

<210> 2390

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2390

Xaa Thr Leu Pro Pro Glu Gly Cys Ser Tyr Arg Met Ala Ile Val Thr  
1 5 10 15  
Met Lys Lys Ser Tyr Pro Gly His Ala Lys Arg Val Met Leu Gly Val  
20 25 30  
Trp Ser Phe Leu Arg Gln Phe Met Tyr Thr Lys Phe Val Ile Val Thr  
35 40 45  
Asp Asp Asp Ile Asn Ala Arg Asp Trp Asn Asp Val Ile Trp Ala Ile  
50 55 60  
Thr Thr Arg Met Asp Pro Lys Arg Asp Thr Val Met Ile Asp Asn Thr  
65 70 75 80  
Pro Ile Asp Tyr Leu Asp Phe Ala Ser Pro Val Ser Gly Leu Gly Ser  
85 90 95  
Lys Met Gly Leu Asp Pro Thr His Lys Trp Pro Gly His Thr Thr Arg  
100 105 110

<210> 2391

<211> 388



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2391

gtcgactaac ctgcgtacag ccgccaccct acgttttagtc gcgaagcgtg tcggctccat  
60  
gttcattccg gagctacacc atgaataaag tactacctga tccaccctac gatcccgcaa  
120  
aagaccgcgt cgctttcaac cgcgccatcg accattacct gcctaccag ggcttccact  
180  
gcgtcaacga agacctgagt ttcgaagacg ccctgctcta caccgccagc ctgctcgaca  
240  
gtgcctctgc caccggcgtg gattgcggtg agctgctgca aagccctgaa cgggcgaaga  
300  
tcctggccgt gtggcatttg ctggaaattg caaaaaccac cgtagatcgc ttcccatcg  
360  
agtgcctgac cgcaccaaag ccctgcct  
388

&lt;210&gt; 2392

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2392

Met	Asn	Lys	Val	Leu	Pro	Asp	Pro	Pro	Ile	Asp	Pro	Ala	Lys	Asp	Arg
1			5						10				15		
Val	Ala	Phe	Asn	Arg	Ala	Ile	Asp	His	Tyr	Leu	Pro	Thr	Gln	Gly	Phe
			20					25					30		
His	Cys	Val	Asn	Glu	Asp	Leu	Ser	Phe	Glu	Asp	Ala	Leu	Leu	Tyr	Thr
		35					40				45				
Ala	Ser	Leu	Leu	Asp	Ser	Ala	Ser	Ala	Thr	Ala	Leu	Asp	Cys	Gly	Glu
	50					55				60					
Leu	Leu	Gln	Ser	Pro	Glu	Arg	Ala	Lys	Ile	Leu	Ala	Val	Trp	His	Leu
65				70					75					80	
Leu	Glu	Ile	Ala	Lys	Thr	Thr	Val	Asp	Arg	Phe	Pro	Ile	Glu	Cys	Leu
			85					90					95		
Thr	Ala	Pro	Lys	Pro	Cys										
			100												

&lt;210&gt; 2393

&lt;211&gt; 411

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2393

aacctgtcta ccgaggacca ggccgagcag gtagagattg tgaagcgctc tgagtcgggc  
60  
atggtcaccg accccatcac tgcgcgcccg gatatgacca tcggggaagt agacgcgctg  
120  
tgcgcccgt tccgatctc cggcctgccg gtggtagacg aggacggcac cctgatgggc  
180  
atttgacca cccgcgatat gcgcttcgag cctgactttg accgcaaggt cagcgaggtc  
240

atgacggcta tgccgcttgt tgttgcgcg cagggtgtat ctaagaagga agccctcgaa  
300  
ctgctctcgg ccaataaggt ggaaaagctg cccatcgctg atgcggataa taagctcacc  
360  
ggcctgatta ccgtcaagga ctttgtcaag accgagcagt accccaacgc g  
411

<210> 2394  
<211> 137  
<212> PRT  
<213> Homo sapiens

<400> 2394  
Asn Leu Ser Thr Glu Asp Gln Ala Glu Gln Val Glu Ile Val Lys Arg  
1 5 10 15  
Ser Glu Ser Gly Met Val Thr Asp Pro Ile Thr Ala Arg Pro Asp Met  
20 25 30  
Thr Ile Gly Glu Val Asp Ala Leu Cys Ala Arg Phe Arg Ile Ser Gly  
35 40 45  
Leu Pro Val Val Asp Glu Asp Gly Thr Leu Met Gly Ile Cys Thr Thr  
50 55 60  
Arg Asp Met Arg Phe Glu Pro Asp Phe Asp Arg Lys Val Ser Glu Val  
65 70 75 80  
Met Thr Ala Met Pro Leu Val Val Ala Arg Glu Gly Val Ser Lys Lys  
85 90 95  
Glu Ala Leu Glu Leu Leu Ser Ala Asn Lys Val Glu Lys Leu Pro Ile  
100 105 110  
Val Asp Ala Asp Asn Lys Leu Thr Gly Leu Ile Thr Val Lys Asp Phe  
115 120 125  
Val Lys Thr Glu Gln Tyr Pro Asn Ala  
130 135

<210> 2395  
<211> 362  
<212> DNA  
<213> Homo sapiens

<400> 2395  
aagctttcag aggagtttgc taaagtgtta aggatttgca tattttcaac ttttagtcata  
60  
tctaagtgcc ccaataaaac agcgcggcgc attgggggct ggctttcatc aacaactaac  
120  
ttagcaatat taatctgacc ttttcttggt gattgggcat ttagtaataa tgcggggcca  
180  
atatcatcat actttccaaa tatttttgat ttttagaca tcaactgaag ttgtgaccat  
240  
ttactgtctt tgtcttgatg gcaatctaaa caaacatctc ttgtattaag ttgttcactt  
300  
acccaaggat taggcactct aaaggcatga tcgcgtcgat catcgactcc catgtaacgc  
360  
gt  
362

<210> 2396

<211> 117  
<212> PRT  
<213> Homo sapiens

<400> 2396  
Met Gly Val Asp Asp Arg Arg Asp His Ala Phe Arg Val Pro Asn Pro  
1 5 10 15  
Trp Val Ser Glu Gln Leu Asn Thr Arg Asp Val Cys Leu Asp Cys His  
20 25 30  
Gln Asp Lys Asp Ser Lys Trp Ser Gln Leu Gln Leu Met Ser Lys Lys  
35 40 45  
Ser Lys Ile Phe Gly Lys Tyr Asp Asp Ile Gly Pro Ala Leu Leu Leu  
50 55 60  
Asn Ala Gln Ser Pro Gly Lys Gly Gln Ile Asn Ile Ala Lys Leu Val  
65 70 75 80  
Val Asp Glu Ser Gln Pro Pro Met Arg Arg Ala Val Leu Leu Gly His  
85 90 95  
Leu Asp Met Thr Lys Val Glu Asn Met Gln Ile Leu Asn Thr Leu Ala  
100 105 110  
Asn Ser Ser Glu Ser  
115

<210> 2397  
<211> 449  
<212> DNA  
<213> Homo sapiens

<400> 2397  
nacagcacac tccgectcct ccgacgatca tagctttcac gtcggacatg atcccccgcc  
60  
tagtgtacta ctggctcttc tccgtccctc cctacgggga ccacacttcc tacaccatgg  
120  
aagggtacat caacaacact ctctccatct tcaaagtcgc agacttcaaa aacaaaagca  
180  
agggaaaccc gtactctgac ctgggtaacc ataccacatg caggtatcgt gatttccgat  
240  
acccacctgg acacccccag gagtataaac acaacatcta ctattggcat gtgattgcag  
300  
ccaagctggc ttttatcatt gtcattggagc acgtcatcta ctctgtgaaa tttttcattt  
360  
catatgcaat tcccgatgta tcaaagcgca caaagagcaa gatccagaga gaaaaatacc  
420  
taacccaaaa gcttttcat gagaatcac  
449

<210> 2398  
<211> 76  
<212> PRT  
<213> Homo sapiens

<400> 2398  
Cys Thr Thr Gly Pro Ser Pro Ser Leu Pro Thr Gly Thr Thr Leu Pro  
1 5 10 15  
Thr Pro Trp Lys Gly Thr Ser Thr Thr Leu Ser Pro Ser Ser Lys Ser

<400> 2401

nttaccgagg taaaactcga tagcctcggg gtcaccgacc agatgcgctc tgggcgctgc  
60  
tggatgtttg ccgcgctcaa cgtattccgc caccgcgcgg ccaaggagct caacatcgat  
120  
gactttgagt tttcctttac ctacctgcag tacttcgaca aactagagcg cgccaacttc  
180  
gcgctcaacc aactgctgga tctcaccgaa gacggcaccg actgggatga ccgcgacgtg  
240  
gctacttccc tcgagctcac aggcgacgac ggcggctggg ggtcattttt caccaacctc  
300  
gtggacaagt acggcgagcgt cccggccgag gtcattgctg aggtgcactc gtccggccac  
360  
accgaccaga tgaatcgaga tatcgccacc atcatccgcc gcgccgcgca ccgtgcggtg  
420  
gaaggcgagg gggatcgagg gggcatcgtc aagcaagccc gccccgatat ccaacgcgt  
479

&lt;210&gt; 2402

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2402

Xaa	Thr	Glu	Val	Lys	Leu	Asp	Ser	Leu	Gly	Val	Thr	Asp	Gln	Met	Arg
1				5					10					15	
Ser	Gly	Arg	Cys	Trp	Met	Phe	Ala	Ala	Leu	Asn	Val	Phe	Arg	His	Arg
			20					25					30		
Ala	Ala	Lys	Glu	Leu	Asn	Ile	Asp	Asp	Phe	Glu	Phe	Ser	Phe	Thr	Tyr
		35					40					45			
Leu	Gln	Tyr	Phe	Asp	Lys	Leu	Glu	Arg	Ala	Asn	Phe	Ala	Leu	Asn	Gln
	50					55					60				
Leu	Leu	Asp	Leu	Thr	Glu	Asp	Gly	Thr	Asp	Trp	Asp	Asp	Arg	Asp	Val
65					70				75					80	
Ala	Thr	Ser	Leu	Glu	Leu	Thr	Gly	Asp	Asp	Gly	Gly	Trp	Trp	Ser	Phe
			85					90					95		
Phe	Thr	Asn	Leu	Val	Asp	Lys	Tyr	Gly	Ala	Val	Pro	Ala	Glu	Val	Met
		100						105					110		
Pro	Glu	Val	His	Ser	Ser	Gly	His	Thr	Asp	Gln	Met	Asn	Arg	Asp	Ile
	115						120					125			
Ala	Thr	Ile	Ile	Arg	Arg	Ala	Ala	His	Arg	Ala	Val	Glu	Gly	Glu	Gly
	130					135					140				
Asp	Arg	Gly	Gly	Ile	Val	Lys	Gln	Ala	Arg	Pro	Asp	Ile	Gln	Arg	
145					150				155						

&lt;210&gt; 2403

&lt;211&gt; 387

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2403

ntcatgaacg gcgataaccc gctggactcg tctgcgggtc acccggaagc ctaccgctg  
60  
gtgcagcgta ttgccgccga gaccggccgt gatatccgtt cgctgatcgg tgacgccgcg  
120

ttcctcaagc gcctggaccc gaagaagtac accgacgaaa ccttcggtgt gccgaccatc  
180  
accgacatcc tgcaagagct ggaaaaacct ggccgcgacc cgcgtcccga gttcaagacc  
240  
gccgagttcc aggacggtgt tgaagacctc aaggacctgc agccgggcat gatcctcgaa  
300  
ggcgtggtca ccaacgtgac caactttggc gcctttgtgg atatcggegt gcatcaggac  
360  
ggtttggtgc acatctctgc acttttcg  
387

<210> 2404  
<211> 129  
<212> PRT  
<213> Homo sapiens

<400> 2404  
Xaa Met Asn Gly Asp Asn Pro Leu Asp Ser Ser Ala Val His Pro Glu  
1 5 10 15  
Ala Tyr Pro Leu Val Gln Arg Ile Ala Ala Glu Thr Gly Arg Asp Ile  
20 25 30  
Arg Ser Leu Ile Gly Asp Ala Ala Phe Leu Lys Arg Leu Asp Pro Lys  
35 40 45  
Lys Tyr Thr Asp Glu Thr Phe Gly Val Pro Thr Ile Thr Asp Ile Leu  
50 55 60  
Gln Glu Leu Glu Lys Pro Gly Arg Asp Pro Arg Pro Glu Phe Lys Thr  
65 70 75 80  
Ala Glu Phe Gln Asp Gly Val Glu Asp Leu Lys Asp Leu Gln Pro Gly  
85 90 95  
Met Ile Leu Glu Gly Val Val Thr Asn Val Thr Asn Phe Gly Ala Phe  
100 105 110  
Val Asp Ile Gly Val His Gln Asp Gly Leu Val His Ile Ser Ala Leu  
115 120 125  
Ser

<210> 2405  
<211> 859  
<212> DNA  
<213> Homo sapiens

<400> 2405  
ttgcaagtaa catcaaaagt catctacaga agcaaaagac aaaaaggccc ctccacctgc  
60  
aaattaaatg gaataatttg ctttatgaga agctcaccat tggggtcatt cttatttttt  
120  
ctcactccac atttcactac aaaccaagga aagctccctc atggaccgac atctggtgag  
180  
ccttcactct tcccctggca atgcctggcc acctgacacc tggcctcctt cctctttcca  
240  
gcaatcctgg taccaacgaa tggtcacca ccacccaccc caatgcccag accgcagacc  
300  
tgcattcctc ccattctaca gcccacaaac caaacggtta ttcattctac ctcccatcct  
360

actcctcagc aattttcttc accgtagact ctggttaatt ggactgactg aagcccaggg  
420  
gtcagtttct gtcctaagag cgctccaggt ggctgcaccc tgtgcccaga gccaggcccc  
480  
ctgctatagg ctgctgcac tccccctgca ggtgctgggg acaccgcaac cctcctcctg  
540  
gggacaccta cttgcctttg caggccctcg ggggtcactt ctcccaggaa gccgcctctg  
600  
ggtgaggtaa tatecctcta tcacagcatt ggccacacca cattgcaaac gctgctgggg  
660  
tccactgtct tcaccaatta caccatgagc tccacagact ccaggacat ggcttctacc  
720  
tctcagttcc cagtgctagc tatggggccc agcacacagg gaacagcagt tcaattaccc  
780  
agttcactga agggcagacc tgggatcata caggagcaa ggaagcttga gccccttcag  
840  
gagaagggga agaacgcgt  
859

<210> 2406  
<211> 149  
<212> PRT  
<213> Homo sapiens

<400> 2406  
Met Asp Arg His Leu Val Ser Leu His Leu Ser Pro Gly Asn Ala Trp  
1 5 10 15  
Pro Pro Asp Thr Trp Pro Pro Ser Ser Phe Gln Gln Ser Trp Tyr Gln  
20 25 30  
Arg Met Ala His His His Pro Pro Gln Cys Pro Asp Arg Arg Pro Ala  
35 40 45  
Phe Leu Pro Ser His Ser Pro Lys Ser Lys Pro Leu Phe Ile Leu Pro  
50 55 60  
Pro Ile Leu Leu Leu Thr Asn Phe Phe His Arg Arg Leu Trp Leu Ile  
65 70 75 80  
Gly Leu Thr Glu Ala Gln Gly Ser Val Ser Val Leu Arg Ala Leu Gln  
85 90 95  
Val Ala Ala Pro Cys Ala Gln Ser Gln Ala Pro Cys Tyr Arg Leu Ala  
100 105 110  
Ala Leu Pro Leu Gln Val Leu Gly Thr Pro Gln Pro Ser Ser Trp Gly  
115 120 125  
His Leu Leu Ala Phe Ala Gly Pro Arg Gly Ser Leu Leu Pro Gly Ser  
130 135 140  
Arg Leu Trp Val Arg  
145

<210> 2407  
<211> 303  
<212> DNA  
<213> Homo sapiens

<400> 2407  
nacgcgtggg ttatcttcag catggtgatc gcgattgggt tagccgttat ggctgcggtc  
60

gtattcatcg agcaaggcca gcgacgtatc ccggtgcagt acgccaagcg gatggtgggg  
 120  
 cgccgaatgt ttggtggctc gacgacgtac attccgctca aggtaaacca atctggcggt  
 180  
 atcccgggtca tctttgcctc gtcgacccctg taccttccgg tgctctacgc aactttccgg  
 240  
 ccgcagacgt ccgcggcaaa gtggatcggg cactacttca cgcgcgggtga ccatccgggtg  
 300  
 tac  
 303

<210> 2408  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 2408  
 Xaa Ala Trp Phe Ile Phe Ser Met Val Ile Ala Ile Gly Leu Ala Val  
 1 5 10 15  
 Met Ala Ala Val Val Phe Ile Glu Gln Gly Gln Arg Arg Ile Pro Val  
 20 25 30  
 Gln Tyr Ala Lys Arg Met Val Gly Arg Arg Met Phe Gly Gly Ser Thr  
 35 40 45  
 Thr Tyr Ile Pro Leu Lys Val Asn Gln Ser Gly Val Ile Pro Val Ile  
 50 55 60  
 Phe Ala Ser Ser Ile Leu Tyr Leu Pro Val Leu Tyr Ala Thr Phe Arg  
 65 70 75 80  
 Pro Gln Thr Ser Ala Ala Lys Trp Ile Gly His Tyr Phe Thr Arg Gly  
 85 90 95  
 Asp His Pro Val Tyr  
 100

<210> 2409  
 <211> 322  
 <212> DNA  
 <213> Homo sapiens

<400> 2409  
 ccatggtttc aagcccccat tgtgtcagcc cagagagcaa ctggagaccc tctgacacca  
 60  
 cctcccggcc caacaggagg ggaagccgaa attcagattg tggaaactgc ctacaatttt  
 120  
 cttccggcca aatgaccctc cctaggctac caagaccctg gcctaagggg agccgaggtc  
 180  
 tcggcccgac tgcagacgcc cgcaccctga ctccagatgc ctccgaggca tccaggtggg  
 240  
 ccctgagggg cctgctgtgg ctttgttctt gttggctggg ctgggggtct gacctggtga  
 300  
 gggacatgag tgcagtggtg gg  
 322

<210> 2410  
 <211> 106  
 <212> PRT



&lt;213&gt; Homo sapiens

&lt;400&gt; 2410

```

Met Val Ser Ser Pro His Cys Val Ser Pro Glu Ser Asn Trp Arg Pro
 1           5           10           15
Ser Asp Thr Thr Ser Arg Pro Asn Arg Arg Gly Ser Arg Asn Ser Asp
           20           25           30
Cys Gly Asn Cys Leu Gln Phe Ser Ser Gly Gln Met Thr Leu Pro Arg
           35           40           45
Leu Pro Arg Pro Trp Pro Lys Gly Ser Arg Gly Leu Gly Pro Thr Ala
           50           55           60
Asp Ala Arg Thr Leu Thr Pro Asp Ala Ser Glu Ala Ser Arg Trp Ala
65           70           75           80
Leu Arg Gly Leu Leu Trp Leu Cys Ser Cys Trp Leu Gly Trp Gly Ser
           85           90           95
Asp Leu Val Arg Asp Met Ser Val Ser Val
           100           105

```

&lt;210&gt; 2411

&lt;211&gt; 371

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2411

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ccatgggctg ggtgctggag acacgagatc aggcaggccc tgcccctggg gctcattcta
60
gggtctgcgg cagacagga gacagagga gctgtgagag ccctgaggct gagggtttt
120
ctggggaagc accatcccta gggacctccg cgttcgggtca gtggccgctg ctgtcgggtg
180
gcagagcaga ggctggggcg agagtgggtca gcaggcctgc tgggtggcagc ttgtgcagga
240
agggaggatg gaggttggct tgtggctggc aagaggggtgg catgcacgtc gctgaaaggc
300
aggcctgggc ccgaggcctg ggtgtgggga cgcctgagga gactgtacag tgtggagtcg
360
ggggggctgc g
371

```

&lt;210&gt; 2412

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2412

```

Met Gly Trp Val Leu Glu Thr Arg Asp Gln Ala Gly Pro Ala Pro Gly
 1           5           10           15
Ala His Ser Arg Val Cys Gly Arg Gln Gly Asp Arg Gly Ser Cys Glu
           20           25           30
Ser Pro Glu Ala Glu Trp Leu Ser Gly Glu Ala Pro Ser Leu Gly Thr
           35           40           45
Ser Ala Phe Gly Gln Trp Pro Leu Leu Ser Val Cys Arg Ala Glu Ala
           50           55           60
Gly Ala Arg Val Val Ser Arg Pro Ala Gly Gly Ser Leu Cys Arg Lys

```

65		70		75		80									
Gly	Gly	Trp	Arg	Leu	Ala	Cys	Gly	Trp	Gln	Glu	Gly	Gly	Met	His	Val
				85					90					95	
Ala	Glu	Arg	Gln	Ala	Trp	Ala	Arg	Gly	Leu	Gly	Val	Gly	Thr	Pro	Glu
			100					105					110		
Glu	Thr	Val	Gln	Cys	Gly	Val	Gly	Gly	Ala	Ala					
		115					120								

&lt;210&gt; 2413

&lt;211&gt; 784

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2413

```

ccccgggagag ttgggcgggg caggggtgtt catggcatatc tcgggattgt gtcatttggt
60
gtggctggat ttaggggtgca tataaaggca gtgaggctgg agaagtattc taggtctgct
120
taggtcact gaggaattgg ggttcttcct gaagagcatg gagcccttgg aggacctcca
180
cagcaggcag agagacggca gcctcctggg atctgattgc ccagccccac ttacacaggt
240
ggctgaggtg agctcttccc atggagtgca tccttctga tcagcctgag gagagcaggg
300
ccccaccatc ctgcacctgg tgcagaaaaa ccctgtgaag ctgcactaca gaaagacacc
360
accaggtggc aggcctggag attgcatgga ggccccgcc cccccaacca attctttgat
420
aatagcacag tgttgaagag agggggccat aaaagactga atccctgttc atgccaggct
480
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540
ccacaggtcc ctctgaacct gtgaatcagg tcttgggagc tattcgagca ggctggattt
600
tctcctctgc ctcgggggac ctgagagtaa gttacagact tcatgaccct tcaccccaaa
660
acacttgagt atgtatcacc taagaacaag ggcattctcc tgtagaacca caatgcaatt
720
tgcaagttca ggaaatttaa ctgatacaat actattatct aattacggag agaagacaac
780
gcgt
784

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&lt;210&gt; 2414

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2414

Met	Lys	Ser	Val	Thr	Tyr	Ser	Gln	Val	Pro	Arg	Gly	Arg	Gly	Glu	Asn
1				5					10					15	
Pro	Ala	Cys	Ser	Asn	Ser	Ser	Gln	Asp	Leu	Ile	His	Arg	Phe	Arg	Gly
			20				25					30			
Thr	Cys	Gly	Leu	Trp	Val	His	Ser	Pro	Gln	Trp	Gln	Asn	Leu	Gln	Ser

35						40				45						
His	Ile	Cys	Trp	Ala	Glu	Pro	Ala	Trp	His	Glu	Gln	Gly	Phe	Ser	Leu	
50						55				60						
Leu	Trp	Pro	Pro	Leu	Phe	Asn	Thr	Val	Leu	Leu	Ser	Lys	Asn	Trp	Leu	
65	70					75					80					
Gly	Gly	Ala	Gly	Pro	Pro	Cys	Asn	Leu	Gln	Ala	Cys	His	Leu	Val	Val	
85					90					95						
Ser	Phe	Cys	Ser	Ala	Ala	Ser	Gln	Gly	Phe	Ser	Ala	Pro	Gly	Ala	Gly	
100					105					110						
Trp	Trp	Gly	Pro	Ala	Leu	Leu	Arg	Leu	Ile	Arg	Lys	Asp	Ala	Leu	His	
115					120					125						
Gly	Lys	Ser	Ser	Pro	Gln	Pro	Pro	Val								
130					135											

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<210> 2415
<211> 2164
<212> DNA
<213> Homo sapiens
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<400> 2415
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120
ccccccaccc gcgtcgccgc catggagggtg ctgcggcgct cttcgggtctt cgctgcggag
180
atcatggacg cctttgatcg ctggcccaca gacaaggagc tggtggtcca ggctaaagca
240
ctaggccggg agtacgtgca cgcgcggctt ttgcgcgccc gcctctcctg gagcgctcca
300
gagcgtgcct cgctgcccc tggaggacgc ctggctgagg tgtgcgcggt gctgctgcgc
360
ctgggcgatg agctggagat gatccggccc agcgtctacc gcaacgtggc gcgtcagctg
420
cacatctccc tgcagtctga gcctgtggtg accgatgcgt tcctggccgt ggctggccac
480
atcttctctg caggcatcac gtgggggcaag gtggtgtccc tgtatgcggt ggccgcgggg
540
ctggccgtgg actgtgtgag gcaggcccag cctgccatgg tcacgcctt cgtggactgc
600
ctgggggagt tcgtgcgcaa gaccctggca acctggctgc ggagacgcgg cggatggact
660
gatgtcctca agtgtgtggt cagcacagac cctggcctcc gctcccactg gctggtggct
720
gcactctgca gcttcggccg cttectgaag gctgccttct tcgtgctgct gccagagaga
780
tgagctgcc acctggcagt ggccgcagcc tggccctctg ggcccaacgc aggaggccct
840
cagcaccgga acacatcttc ctctcccca cccgagcctg gagcactcta acctcggaga
900
ccccctaagc cccgttcctc cgcagacca ggccctccgg aagggtgagt ggggaggggc
960
tttcttgagc ctggagctgg gctttggggc agcctgcgac cctccccgt tgtgtccctt
1020

```

ctcctgtgat ctctgtgttt tcccttttct ttctggggcc aggaagtcag ggtcaactcc  
1080  
caggcctcag gtgaaggggc ccagaacacc tgctctcacc tgagccccag gtgaaggggc  
1140  
ccgggaacac ctgctctcac ctgagcccca ggtgaagggg cccgggaaca cctgctctca  
1200  
cctgagcccc tgggaaggg gcccgggaaca cctgctctca cctgagcccc aggtgaaggg  
1260  
gcccgggaaca cctgctctca cctgagcccc aggtgaaggg gcccgggaaca cctgctctca  
1320  
cctgagcccc aggtgaaggg gcccgggaac acctctcacc tgaaccggg ggtcccatcc  
1380  
caggaagaag ggccatctca ggacatgagt cctcaggggc cctgcacatt caatctgaag  
1440  
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1500  
aagggtcaca tgctgggtgc ttaatccgtt tctggaggaa gagtatgaca cccacttggt  
1560  
atggggctct tgtgcggtgg ggaccggggc cggcgggctc caggccagca cacctaacc  
1620  
atggatgtgg aacctacggc cgagaaggaa tgttgcatga gtcggatccc agtccattgt  
1680  
cagtggaggg tgaggggtgac cccatctgct atttttgtgc tcatcctcat acaaccattt  
1740  
ggggatgtgc ctattagggc tccgtaagaa ctcagatgcc tgggaagccc agcccctcag  
1800  
gtgccccac acacagcctt cccttgacgc ctacatttct aggcacatgt gaggcattt  
1860  
tcctggagcc ccgagccagc cctgtccctc cccagtgcag catggcactc aggagataca  
1920  
ggctggacat ggggcagtcg ttctggggag gcctggccta gcagccacc acctgagccc  
1980  
tcccggccag gcttcgtgct ggggtggggc atgtgccagg acaggagggg cccggcggaa  
2040  
agccagcccc ggactcatcg tgacattgag atcccactgg agggtagggg tggtataaaa  
2100  
cttctccaaa cgataaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  
2160  
aaaa  
2164

&lt;210&gt; 2416

&lt;211&gt; 213

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2416

Met	Glu	Val	Leu	Arg	Arg	Ser	Ser	Val	Phe	Ala	Ala	Glu	Ile	Met	Asp
1				5					10					15	
Ala	Phe	Asp	Arg	Trp	Pro	Thr	Asp	Lys	Glu	Leu	Val	Ala	Gln	Ala	Lys
			20					25					30		
Ala	Leu	Gly	Arg	Glu	Tyr	Val	His	Ala	Arg	Leu	Leu	Arg	Ala	Gly	Leu
		35				40						45			
Ser	Trp	Ser	Ala	Pro	Glu	Arg	Ala	Ser	Pro	Ala	Pro	Gly	Gly	Arg	Leu

50	55	60
Ala Glu Val Cys Ala Val Leu Leu Arg Leu Gly Asp Glu Leu Glu Met		
65	70	75
Ile Arg Pro Ser Val Tyr Arg Asn Val Ala Arg Gln Leu His Ile Ser		80
	85	90
Leu Gln Ser Glu Pro Val Val Thr Asp Ala Phe Leu Ala Val Ala Gly		95
	100	105
His Ile Phe Ser Ala Gly Ile Thr Trp Gly Lys Val Val Ser Leu Tyr		110
	115	120
Ala Val Ala Ala Gly Leu Ala Val Asp Cys Val Arg Gln Ala Gln Pro		125
	130	135
Ala Met Val His Ala Leu Val Asp Cys Leu Gly Glu Phe Val Arg Lys		140
	145	150
Thr Leu Ala Thr Trp Leu Arg Arg Arg Gly Gly Trp Thr Asp Val Leu		155
	160	165
Lys Cys Val Val Ser Thr Asp Pro Gly Leu Arg Ser His Trp Leu Val		170
	175	180
Ala Ala Leu Cys Ser Phe Gly Arg Phe Leu Lys Ala Ala Phe Phe Val		185
	190	195
Leu Leu Pro Glu Arg	200	205
210		

&lt;210&gt; 2417

&lt;211&gt; 615

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2417

nnagatcttt ggaatgggca gaactactaa atacagttaa tgcaccaaca agggtaagta  
 60  
 aagctgattt gattttcata ttgatacctc aatagttaag tgaaggacta gttattgctc  
 120  
 cagttgttag ttttcacact ttaaaaaagg ctttcaatta taaaatcttt ctccattatt  
 180  
 acgttttttc acaactgtga tccacgccac agttgcaa atcaacata gaaaaattaa  
 240  
 ataacataat tgatgaaaag ttagtttttc acaaaaatac gaaaaatttc atcacctaga  
 300  
 gaggaaaatg ttatgacaac ctatttcgat aaaattgaaa aaatctcctt tgagggagaa  
 360  
 aaatccacaa atccttttgc tttcaaacat tatgatgcta atcaagtaat tttaggtaaa  
 420  
 actatggctg aacatttacg cttaacggtg tgttattggc ataccttttg ctggaatggg  
 480  
 aatgatatgt ttgggctagg ttctttggaa cgaagtggc agaaaaattc aaatttgctt  
 540  
 gctggcgcag aacaaaaagc cgatattgct tttgagtttt tgaataagtt aggcgtgcct  
 600  
 tattattggt ttcac  
 615

&lt;210&gt; 2418

&lt;211&gt; 101

&lt;212&gt; PRT

<213> Homo sapiens

<400> 2418

```

Met Thr Thr Tyr Phe Asp Lys Ile Glu Lys Ile Ser Phe Glu Gly Glu
 1           5           10           15
Lys Ser Thr Asn Pro Phe Ala Phe Lys His Tyr Asp Ala Asn Gln Val
          20           25           30
Ile Leu Gly Lys Thr Met Ala Glu His Leu Arg Leu Thr Val Cys Tyr
          35           40           45
Trp His Thr Phe Cys Trp Asn Gly Asn Asp Met Phe Gly Leu Gly Ser
          50           55           60
Leu Glu Arg Ser Trp Gln Lys Asn Ser Asn Leu Leu Ala Gly Ala Glu
65           70           75           80
Gln Lys Ala Asp Ile Ala Phe Glu Phe Leu Asn Lys Leu Gly Val Pro
          85           90           95
Tyr Tyr Cys Phe His
          100

```

<210> 2419

<211> 318

<212> DNA

<213> Homo sapiens

<400> 2419

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aaattttcag aagtcctggt gttgcgcggt caaacaggga ccgaggaggg acgaccgcct
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ccccgtgacg ctgcttcttc ttcctgcctg cagctgaggg gtctgttttg tgctgcttcc
120
gctccttctt cacgtacaca gggggcagct tagcctctgg gatgggagtg gcttcataca
180
tgagacacat gcccgagtcg aggtagatgt cgctgtcgtc ctgcggcggg gtgggtgggg
240
tccagaacgg catgacttct gtctgcccat cgacatcttc gtagacatac tccatgttgt
300
aggcatcccc tcacgcgt
318

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<210> 2420

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2420

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Met Glu Tyr Val Tyr Glu Asp Val Asp Gly Gln Thr Glu Val Met Pro
 1           5           10           15
Phe Trp Thr Pro Pro Thr Pro Pro Gln Asp Asp Ser Asp Ile Tyr Leu
          20           25           30
Asp Ser Gly Met Cys Leu Met Tyr Glu Ala Thr Pro Ile Pro Glu Ala
          35           40           45
Lys Leu Pro Pro Val Tyr Val Arg Lys Glu Arg Lys Arg His Lys Thr
          50           55           60
Asp Pro Ser Ala Ala Gly Arg Lys Lys Lys Gln Arg His Gly Glu Ala
65           70           75           80
Val Val Pro Pro Arg Ser Leu Phe Asp Arg Ala Thr Pro Gly Leu Leu

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85 90 95

Lys Ile

<210> 2421  
<211> 420  
<212> DNA  
<213> Homo sapiens

<400> 2421  
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tactggttgt ttgacagtgc agggcttgtg cacagacgtg agccacaggg cagcacaacg  
120  
ctgtcgcaag tctgagtagg gattatcatg acggatacaa cttcagcccc gcgttacgcg  
180  
ctgcgtgggc tacagcttat tggctggcgt gacatgcaac acgcgctgga tttcctgttc  
240  
gcggacgggc agatgaaatc gggcacgctg gtggccatca acgcagaaaa gatgctggcg  
300  
gttgaagata atgcggaagt gaaaagcctg attgaagccg cggagtttaa ataccggcc  
360  
ggtagtagcg tagtgcgttc aattcgtaaa aagttcccc acgctggagt gtgctcgca  
420

<210> 2422  
<211> 91  
<212> PRT  
<213> Homo sapiens

<400> 2422  
Met Thr Asp Thr Thr Ser Ala Pro Arg Tyr Ala Leu Arg Gly Leu Gln  
1 5 10 15  
Leu Ile Gly Trp Arg Asp Met Gln His Ala Leu Asp Phe Leu Phe Ala  
20 25 30  
Asp Gly Gln Met Lys Ser Gly Thr Leu Val Ala Ile Asn Ala Glu Lys  
35 40 45  
Met Leu Ala Val Glu Asp Asn Ala Glu Val Lys Ser Leu Ile Glu Ala  
50 55 60  
Ala Glu Phe Lys Tyr Pro Ala Gly Ile Ser Val Val Arg Ser Ile Arg  
65 70 75 80  
Lys Lys Phe Pro His Ala Gly Val Cys Ser Arg  
85 90

<210> 2423  
<211> 371  
<212> DNA  
<213> Homo sapiens

<400> 2423  
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gagctcaacg ccaagcacia gaagatattg gaaggctctc tacggcatcc tgagaataga  
120

gaatgcgcag actgcaagtc aaagggctct cgatgggcaa gtgtgaatct aggtatcttt  
180  
atatgcatga catgttctgg cattcataga agcctggggg tgcacatatc taaggtaaga  
240  
tctgccaccc tggatacatg gctgccagag caagttgcat ttattcaatc aatgggaaac  
300  
gaaaaagcaa atagctattg ggaagcagag ctgcctccta actacgatag ggttggaata  
360  
gagaatttga t  
371

&lt;210&gt; 2424

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2424

Met	Asn	Glu	Lys	Ala	Ser	Val	Ser	Lys	Glu	Leu	Asn	Ala	Lys	His	Lys
1				5					10					15	
Lys	Ile	Leu	Glu	Gly	Leu	Leu	Arg	His	Pro	Glu	Asn	Arg	Glu	Cys	Ala
		20						25					30		
Asp	Cys	Lys	Ser	Lys	Gly	Pro	Arg	Trp	Ala	Ser	Val	Asn	Leu	Gly	Ile
		35					40					45			
Phe	Ile	Cys	Met	Thr	Cys	Ser	Gly	Ile	His	Arg	Ser	Leu	Gly	Val	His
		50				55				60					
Ile	Ser	Lys	Val	Arg	Ser	Ala	Thr	Leu	Asp	Thr	Trp	Leu	Pro	Glu	Gln
65				70					75					80	
Val	Ala	Phe	Ile	Gln	Ser	Met	Gly	Asn	Glu	Lys	Ala	Asn	Ser	Tyr	Trp
			85					90					95		
Glu	Ala	Glu	Leu	Pro	Pro	Asn	Tyr	Asp	Arg	Val	Gly	Ile	Glu	Asn	Leu
			100					105					110		

&lt;210&gt; 2425

&lt;211&gt; 411

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2425

accggtttgc aggcctggaa agacgggcat ttcgacctgg tgatcgtcga ctgcaacatg  
60  
cccgtcctga acggctacga gatgacccgc cgcctgcgcg aacatgaagc cnnccgcatg  
120  
acctcccggc ctgcacgggg gtctcggtttc accgcccacg cccagcccga ggaacgcccc  
180  
cgctgcaagg aagccggcat gaacgactgc ctgttcaagc ccatcagcct gaccaccctc  
240  
aaccagaaac tcgccgacgt cacgccgcgc ccgcgtccga gccaggccgc cttcagcctc  
300  
gacggcctgc acgccctgac cgggggcgag ccgctgctga tgcgtcgctt gatcgacgag  
360  
ctgctgagca gttgccaggc ggcccgcgag gcactgctcg gactgcccac c  
411

&lt;210&gt; 2426



<211> 137  
<212> PRT  
<213> Homo sapiens

<400> 2426  
Thr Gly Leu Gln Ala Trp Lys Asp Gly His Phe Asp Leu Val Ile Val  
1 5 10 15  
Asp Cys Asn Met Pro Val Leu Asn Gly Tyr Glu Met Thr Arg Arg Leu  
20 25 30  
Arg Glu His Glu Ala Xaa Ala Met Thr Ser Arg Pro Ala Arg Gly Phe  
35 40 45  
Gly Phe Thr Ala His Ala Gln Pro Glu Glu Arg Pro Arg Cys Lys Glu  
50 55 60  
Ala Gly Met Asn Asp Cys Leu Phe Lys Pro Ile Ser Leu Thr Thr Leu  
65 70 75 80  
Asn Gln Lys Leu Ala Asp Val Thr Pro Arg Pro Arg Pro Ser Gln Ala  
85 90 95  
Ala Phe Ser Leu Asp Gly Leu His Ala Leu Thr Gly Gly Glu Pro Leu  
100 105 110  
Leu Met Arg Arg Leu Ile Asp Glu Leu Leu Ser Ser Cys Gln Ala Ala  
115 120 125  
Arg Glu Ala Leu Leu Gly Leu Pro Ile  
130 135

<210> 2427  
<211> 293  
<212> DNA  
<213> Homo sapiens

<400> 2427  
cataacaaag gcttagggat tttggtgccc tgtgcaattn tggcagcttt tctgttgatt  
60  
tggagcgtaa aatgttgcag agcccagcta gaagccagga ggagcagaca ccctgctgat  
120  
ggagcccaac aagaaagatg ttgtgtccct cctggtgagc gctgtcccag tgcacccgat  
180  
aatggcgaag aaaatgtgcc tctttcagga aaagtatagg aaatgagaga agactgtgac  
240  
aactcatgac ctgcattcctt aatatccagt gacttcatct ccccttcacg cgt  
293

<210> 2428  
<211> 72  
<212> PRT  
<213> Homo sapiens

<400> 2428  
His Asn Lys Gly Leu Gly Ile Leu Val Pro Cys Ala Ile Xaa Ala Ala  
1 5 10 15  
Phe Leu Leu Ile Trp Ser Val Lys Cys Cys Arg Ala Gln Leu Glu Ala  
20 25 30  
Arg Arg Ser Arg His Pro Ala Asp Gly Ala Gln Gln Glu Arg Cys Cys  
35 40 45  
Val Pro Pro Gly Glu Arg Cys Pro Ser Ala Pro Asp Asn Gly Glu Glu

50 55 60  
Asn Val Pro Leu Ser Gly Lys Val  
65 70

<210> 2429  
<211> 428  
<212> DNA  
<213> Homo sapiens

<400> 2429  
tcgcgtcggg tcggcgaggc tgacgctgtt gacctaagc cccatgagga cgacgacctc  
60  
atcgccgaga tggcggggct acaggctgct cagtcgatcc gggaatcctt gaacaaggct  
120  
gatgtcctgc tcaatggggc agagacgtcg accgggtccgc agccgggtgc gcttgctttg  
180  
ctggaacagg ccgtacatga gctggatggc actgggggatg ctgacccctc cgccgctgag  
240  
ttggctgagc gcgcccgcga gatgtcgtat gacctcactg acctcgctgc ttcggctcgt  
300  
ggccatgcgg ctcgggctga agctgatccg caacggcttg aggaattggg gggctcgttg  
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420  
actgcggc  
428

<210> 2430  
<211> 142  
<212> PRT  
<213> Homo sapiens

<400> 2430  
Ser Arg Arg Val Gly Glu Val Asp Ala Val Asp Pro Lys Pro His Glu  
1 5 10 15  
Asp Asp Asp Leu Ile Ala Glu Met Ala Gly Leu Gln Ala Ala Gln Ser  
20 25 30  
Ile Arg Glu Ser Leu Asn Lys Ala Asp Val Leu Leu Asn Gly Val Glu  
35 40 45  
Thr Ser Thr Gly Pro Gln Pro Gly Ala Leu Ala Leu Leu Glu Gln Ala  
50 55 60  
Val His Glu Leu Asp Gly Thr Gly Asp Ala Asp Pro Arg Ala Ala Glu  
65 70 75 80  
Leu Ala Glu Arg Ala Arg Gln Met Ser Tyr Asp Leu Thr Asp Leu Ala  
85 90 95  
Ala Ser Val Ala Gly His Ala Ala Arg Ala Glu Ala Asp Pro Gln Arg  
100 105 110  
Leu Glu Glu Leu Gly Gly Arg Leu Ala Ala Ile Gln Arg Leu Leu Arg  
115 120 125  
Ala Arg Thr Thr Thr Leu Asp Asp Leu Leu Asp Ser Thr Ala  
130 135 140

<210> 2431  
<211> 409

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2431

nnacgcgtta acaattaaag cattaacgcc agatgaatgg caaaaacaaa aacatTTTTat  
 60  
 atagtcgggt aaatagggat tttcatgggt caatttatta ttcaagggtg ctgccagtta  
 120  
 aatggcgagg taacaatttc tggggcaaaa aatgccgcat taccaatcct atttgctact  
 180  
 ttattatctg aggggtgat caatttaagc aatgtaccgc ttttaaaga tattgccacc  
 240  
 actatcgagt tgtaaaga gctgggtgct actgctactc agactcaaca ctgctgcat  
 300  
 attaatgca aagaagtaa gaactatact gcttcttatg aattagttag aagtatgct  
 360  
 gcttcaattt tggcattagg tccattgggt gctcgggttc gtgaagctt  
 409

&lt;210&gt; 2432

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2432

Met	Gly	Gln	Phe	Ile	Ile	Gln	Gly	Gly	Cys	Gln	Leu	Asn	Gly	Glu	Val
1				5				10					15		
Thr	Ile	Ser	Gly	Ala	Lys	Asn	Ala	Ala	Leu	Pro	Ile	Leu	Phe	Ala	Thr
			20				25					30			
Leu	Leu	Ser	Glu	Gly	Asp	Ile	Asn	Leu	Ser	Asn	Val	Pro	Leu	Leu	Lys
		35				40				45					
Asp	Ile	Ala	Thr	Thr	Ile	Glu	Leu	Leu	Lys	Glu	Leu	Gly	Ala	Thr	Ala
	50				55				60						
Thr	Gln	Thr	Gln	His	Cys	Val	His	Ile	Asn	Ala	Lys	Glu	Val	Lys	Asn
65				70				75						80	
Tyr	Thr	Ala	Ser	Tyr	Glu	Leu	Val	Arg	Ser	Met	Arg	Ala	Ser	Ile	Leu
			85					90						95	
Ala	Leu	Gly	Pro	Leu	Val	Ala	Arg	Phe	Gly	Glu	Ala				
			100					105							

&lt;210&gt; 2433

&lt;211&gt; 655

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2433

caattgccta caatattcag tacagtcaca tgctgcatag gtttgcagtc tagaaacaac  
 60  
 aggctacacc acacagccga ggcgtgtgga ggactatacc atctgggttt acgtaagtgc  
 120  
 gctctatgat gctcacgtaa caatgaaatc acggaatctc tctctcagaa catttccccg  
 180  
 ttgtgaagca gcacgtgact ataatctttt cccagggtta cccctgaagt tcaagtgcaa  
 240

tgcccctgca cagcacagag caggggacga taggaggcgt gccttctcca gctgaaccac  
300  
cgggccagcc gggcgggcag tgggggttgg ggggagggtt gaccattgg tgctgccacg  
360  
accaaagaga caggatcttg gagagagtga ggcctctgtg caggggacga tgaaggcca  
420  
atctggggac atcagggaaa gcagcaaggg tctggctgat tgtgcaaaaa gaactttttc  
480  
tgtgactgcc gtgttccaaa cacacccttt gcttttacia aaacccaaac tgggaggttt  
540  
agcaaaaggc acagtttcag agcataataa agacagagca gaatgggaga ggaggttaat  
600  
caaatgggcc atcactcaat gcagggaggg gaggggtgtg ctcaggacaa cgcgt  
655

<210> 2434  
<211> 137  
<212> PRT  
<213> Homo sapiens

<400> 2434  
Met Ala His Leu Ile Asn Leu Leu Ser His Ser Ala Leu Ser Leu Leu  
1 5 10 15  
Cys Ser Glu Thr Val Pro Phe Ala Lys Pro Pro Ser Leu Gly Phe Cys  
20 25 30  
Lys Ser Lys Gly Cys Val Trp Asn Thr Ala Val Thr Glu Lys Val Leu  
35 40 45  
Phe Ala Gln Ser Ala Arg Pro Leu Leu Leu Ser Leu Met Ser Pro Asp  
50 55 60  
Trp Ala Phe Ile Val Pro Cys Thr Glu Ala Ser Leu Ser Pro Arg Ser  
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Cys Leu Phe Gly Arg Gly Ser Thr Asn Gly Ser Thr Leu Pro Pro Thr  
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Pro Thr Ala Arg Pro Ala Gly Pro Val Val Gln Leu Glu Lys Ala Arg  
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<211> 401  
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<213> Homo sapiens

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<211> 1306

<212> PRT

<213> Homo sapiens

<400> 2440

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Lys	Arg	Arg	Asp	Ser	Asn	Ala	Ala	Pro	Leu	Leu	Glu	Ile	Leu	Thr	Asp
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Gln	Cys	Leu	Thr	Tyr	Glu	Gln	Ile	Thr	Gly	Trp	Trp	Tyr	Ser	Val	Arg
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Leu	Phe	Pro	Gly	Phe	Arg	Pro	Ala	Val	Glu	Ala	Cys	Tyr	Phe	Asn	Trp
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Pro Thr Thr Ala Ser Gln Arg Ser Pro Ser Lys His Gly Gly Pro Ser  
755 760 765  
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770 775 780  
Gln Pro Gly Ser Val Ala Gly Ala Gly Pro Gly Pro Thr Glu Gly Phe  
785 790 795 800  
Thr Glu Lys Asn Val Pro Glu Ser Ser Pro His Ser Pro Cys Glu Gly  
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Gln Asp Ser Asp Ser Ile Ser Ser Ser Ser Asp Ser Leu Gly Ser  
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 <212> PRT  
 <213> Homo sapiens

<400> 2442  
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 Lys Lys Lys Lys Lys Lys Lys  
 165

<210> 2443  
 <211> 361  
 <212> DNA  
 <213> Homo sapiens

<400> 2443  
 nccgtgcgcg ctatcttgcg tcgtacgccg tccagggaag atgaaaaaat gctacaaacg  
 60  
 gccgatggac gattgcgcat tgatatcgaa tccatgcgca cctttgtaga gggcaaagaa  
 120  
 gtccatttga cgaaaaacga atttttaatt gtgcagactt tgtttacgca cccaataag  
 180  
 atctatacgc gcgatgaaat tatcgaagtc accttcggaa tggattatga ggcctttgac  
 240  
 cgtgccattg atacccatat caaaaacatt cgccagaaga ttgaagcgga tccgaaaaac  
 300  
 cccgtctata tccgcacggt ttatggtgtc gggtatctgc ccggaggctt tgatgaagct  
 360  
 t  
 361

<210> 2444  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 2444

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Xaa Val Arg Ala Ile Leu Arg Arg Thr Pro Ser Arg Glu Asp Glu Lys
 1           5           10           15
Met Leu Gln Thr Ala Asp Gly Arg Leu Arg Ile Asp Ile Glu Ser Met
          20           25           30
Arg Thr Phe Val Glu Gly Lys Glu Val His Leu Thr Lys Asn Glu Phe
          35           40           45
Leu Ile Val Gln Thr Leu Phe Thr His Pro Asn Lys Ile Tyr Thr Arg
          50           55           60
Asp Glu Ile Ile Glu Val Thr Phe Gly Met Asp Tyr Glu Ala Phe Asp
65           70           75           80
Arg Ala Ile Asp Thr His Ile Lys Asn Ile Arg Gln Lys Ile Glu Ala
          85           90           95
Asp Pro Lys Asn Pro Val Tyr Ile Arg Thr Val Tyr Gly Val Gly Tyr
          100          105          110
Leu Pro Gly Gly Phe Asp Glu Ala
          115          120

```

&lt;210&gt; 2445

&lt;211&gt; 403

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2445

```

agatctgttg aatgaagcag gtgccactta gacattcact tcactgactc caaccacaac
60
ctcccccttca tttgatatcc tgctcttggc agaaggatgg agaaagagca tcgcacaaag
120
aggaagcatg tttatcctgt tcagattact gcttctgcca ggctgctgct gctgttgggt
180
tctgcacatt tgctctttat taagcaaatg tcagagctgg gtgctggcaa gggaatcccc
240
tgtatttaca caggtaaacc tgagagccag agggccccc aa accatcctgg ctgcgaggga
300
caagctatta gagttaataa cagtgcactg gcattccttc aaaatcctaa tggaagcata
360
aataaaaaga ggaaagtccc ctttacccaa gaacctgaaa aan
403

```

&lt;210&gt; 2446

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2446

```

Met Glu Lys Glu His Arg Thr Lys Arg Lys His Val Tyr Pro Val Gln
 1           5           10           15
Ile Thr Ala Ser Ala Arg Leu Leu Leu Leu Gly Ser Ala His Leu
          20           25           30
Leu Phe Ile Lys Gln Met Ser Glu Leu Gly Ala Gly Lys Gly Ile Pro
          35           40           45
Cys Ile Tyr Thr Gly Lys Pro Glu Ser Gln Arg Ala Pro Asn His Pro
          50           55           60
Gly Cys Glu Gly Gln Ala Ile Arg Val Asn Asn Ser Ala Leu Ala Phe

```

65                      70                      75                      80  
Leu Gln Asn Pro Asn Gly Ser Ile Asn Lys Lys Arg Lys Val Pro Phe  
                         85                      90                      95  
Thr Gln Glu Pro Glu Lys  
                         100

<210> 2447  
<211> 744  
<212> DNA  
<213> Homo sapiens

<400> 2447  
naccggtcga gggttgccag tcacgggttg cgggtggggc aggtactact caccgtcaat  
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gacctggtgc ggcccacttc gtaccgcaat gcctgggtcaa ccctcgacac tttgctgggg  
120  
ttgggcgtcg tgccgatcgt caacgagaac gacacggtcg ccaccggaga aattcggttt  
180  
ggcgataatg atcggcttgc tgccctggta gccgagctgg tgcgcgtca agccctcatt  
240  
ctgctctctg acgttgacgc cttgtacacc gcccatccgg attcaccgga tgctcgtcgc  
300  
gtggagggtt tggaggacat cgatgcattg gatgtcgata ccataaagc tggttcgggg  
360  
gtgggaaccg gcggcatgac cacgaaactt gaagccgcc gaatggccac ctgtgccggg  
420  
gtaccggtgg tactcgcagc ggcggtggat gcccggacg ttctggctgg tgccccgtg  
480  
ggtacctact tccgcccgtt ggcgacgcga cggccccgac ggttgctgtg gttggccgac  
540  
gctgccaccc cgcagggaca gatcgtcatc gacgacggag ctgtcgaagc tttgacacag  
600  
cgtcattcct cgttgttggc ggtgggtgtg actcgggtac acggggattt ccaagcaggc  
660  
gaccagtgta cgatcctggc ctccgacggt cgagttgttg gtcgcggtat cgcccagttc  
720  
tcccatgatg aggtgcgcgt catg  
744

<210> 2448  
<211> 248  
<212> PRT  
<213> Homo sapiens

<400> 2448  
Xaa Ala Ser Arg Phe Ala Ser His Gly Leu Arg Val Gly Gln Val Leu  
1                      5                      10                      15  
Leu Thr Val Asn Asp Leu Val Arg Pro Thr Ser Tyr Arg Asn Ala Trp  
                         20                      25                      30  
Ser Thr Leu Asp Thr Leu Leu Gly Leu Gly Val Val Pro Ile Val Asn  
                         35                      40                      45  
Glu Asn Asp Thr Val Ala Thr Gly Glu Ile Arg Phe Gly Asp Asn Asp  
50                      55                      60  
Arg Leu Ala Ala Leu Val Ala Glu Leu Val Arg Ala Gln Ala Leu Ile



```

65          70          75          80
Leu Leu Ser Asp Val Asp Ala Leu Tyr Thr Ala His Pro Asp Ser Pro
      85          90          95
Asp Ala Arg Arg Val Glu Val Val Glu Asp Ile Asp Ala Leu Asp Val
      100         105         110
Asp Thr His Lys Ala Gly Ser Gly Val Gly Thr Gly Gly Met Thr Thr
      115         120         125
Lys Leu Glu Ala Ala Arg Met Ala Thr Cys Ala Gly Val Pro Val Val
      130         135         140
Leu Ala Ala Ala Val Asp Ala Pro Asp Val Leu Ala Gly Ala Pro Val
      145         150         155         160
Gly Thr Tyr Phe Arg Pro Leu Ala Thr Arg Arg Pro Arg Arg Leu Leu
      165         170         175
Trp Leu Ala Asp Ala Ala Thr Pro Gln Gly Gln Ile Val Ile Asp Asp
      180         185         190
Gly Ala Val Glu Ala Leu Thr Gln Arg His Ser Ser Leu Leu Ala Val
      195         200         205
Gly Val Thr Arg Val His Gly Asp Phe Gln Ala Gly Asp Pro Val Thr
      210         215         220
Ile Leu Ala Ser Asp Gly Arg Val Val Gly Arg Gly Ile Ala Gln Phe
      225         230         235         240
Ser His Asp Glu Val Arg Val Met
      245

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&lt;210&gt; 2449

&lt;211&gt; 296

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2449

```

gtgcacttttg ttacagccct ggaacatgaa cacatgccgt catcaactcc ccaaaatctc
60
ctactgctct cccctcctcc ctgggccctg tcctatcccc agaggccaga caggccttcc
120
tcgcatgcaa gagtctccct cgccctgccg gacagtggcc tccatctacc tgcctgtctt
180
gctggactcc agaacactcc agtcctttcc cccttggggg ttgggggggg ccccccttt
240
ttttccccc ctttcctct tcattccaca ggaggccagc ctcaacatcc cncccc
296

```

&lt;210&gt; 2450

&lt;211&gt; 90

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2450

```

Met Asn Thr Cys Arg His Gln Leu Pro Lys Ile Ser Tyr Cys Ser Pro
1      5      10      15
Leu Leu Pro Gly Pro Cys Pro Ile Pro Arg Gly Gln Thr Gly Leu Pro
20     25     30
Arg Met Gln Glu Ser Pro Ser Pro Cys Arg Thr Val Ala Ser Ile Tyr
35     40     45
Leu Pro Val Leu Leu Asp Ser Arg Thr Leu Gln Ser Phe Pro Pro Trp

```

50	55	60
Gly Leu Gly Gly Ala Pro Pro Phe Phe Pro Pro Leu Ser Leu Phe Ile		
65	70	75
Pro Gln Glu Ala Ser Leu Asn Ile Pro Xaa		80
85	90	

<210> 2451  
 <211> 589  
 <212> DNA  
 <213> Homo sapiens

<400> 2451  
 nacgcgtgac tggattgctc aacgggtgag gaatcgagcg gttacgatgt cgggccgac  
 60  
 tgcaacgatg atcttgtgag cgatgtattg accggtgtgt gggccgatct tgtgggccag  
 120  
 gagaaggctg tcggggtcct gcgtcgtgcc gccgaatcgc agccggggcg ctgcgccat  
 180acgcattggt cattacgggt ccgcctggat caggctggtc gaatgctgcg 240  
 aaggcctttg cagcggcgct acagtgcgtc gaccatggat gcgggcagtg caatgcctgt  
 300  
 cgaaccngcc tgcaggcgcc ccaccctgac gtcaccctcg tgcgtactga ggcgctgtct  
 360  
 attggcgtcg attgaggtcg tgaaatgggt ttgttcgagc gggcgatgaa ttcgggtccc  
 420  
 cggggcgctc ccagggttgt cgtcgtcgaa gatgccgacc gcatcactga acgcggagct  
 480  
 gacgccttgc ttaaagctat cgaggagcct gcgccgaaaa ccgtctgggt gctgtgtgcc  
 540  
 cctactccag aggacgtcat cgtcacgac aggtcgagat gtcggcgcc  
 589

<210> 2452  
 <211> 121  
 <212> PRT  
 <213> Homo sapiens

<400> 2452  
 Leu Asp Cys Ser Thr Gly Glu Glu Ser Ser Gly Tyr Asp Val Gly Pro  
 1 5 10 15  
 Ile Cys Asn Asp Asp Leu Val Ser Asp Val Leu Thr Gly Val Trp Ala  
 20 25 30  
 Asp Leu Val Gly Gln Glu Lys Ala Val Gly Val Leu Arg Arg Ala Ala  
 35 40 45  
 Glu Ser Gln Pro Gly Arg Ser Ser His Ala Met Ser His Ala Trp Leu  
 50 55 60  
 Ile Thr Gly Pro Pro Gly Ser Gly Arg Ser Asn Ala Ala Lys Ala Phe  
 65 70 75 80  
 Ala Ala Ala Leu Gln Cys Val Asp His Gly Cys Gly Gln Cys Asn Ala  
 85 90 95  
 Cys Arg Thr Xaa Leu Ser Gly Ala His Pro Asp Val Thr Leu Val Arg  
 100 105 110  
 Thr Glu Ala Leu Ser Ile Gly Val Asp  
 115 120

<210> 2453  
<211> 695  
<212> DNA  
<213> Homo sapiens

<400> 2453  
nnacgcgtca gccatctgtg agtgctcaca ctatacacac atccccgggc acactcaggg  
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agattcacac attcctacga gcacacatgt gcctgcatga gttattcccc atgtgaacac  
120  
acaggttggc acacgcacat gcccctgggt atgctcatgt ccattcatcc atcccagcct  
180  
gtgcacgtcc tctcactcct gtgttcacac ctatgcccac atgaaccaag ggacacacat  
240  
gcacaccctt atgtggtgca cacacactcg tgcacacgga gccacaccag cacatgctca  
300  
gaggcatttg tgtgcgtggg catttgacgc atgactcaga acggagtatg ggggtggcgcg  
360  
gcgtggctgg ggagggtcca tcagcccgcc tctgaaaccc tcccaacctg cccatcctgg  
420  
cccaggcact gtgtctccgg cttgggcttc agccccggac cccaggacac cccggacaaa  
480  
gaggagctgc tctcgtctga agcctgctac gaatgcagga tcaatggcct ctcccctcgg  
540  
gaccggccac gacgcagtgc ccacaggagc caccagggtga catgggtgct gcactaggca  
600  
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660  
agccccccga agaaggagca ccagggtcca gatct  
695

<210> 2454  
<211> 166  
<212> PRT  
<213> Homo sapiens

<400> 2454  
Met Ser Tyr Ser Pro Cys Glu His Thr Gly Trp His Thr His Met Pro  
1 5 10 15  
Leu Gly Met Leu Met Ser Ile His Pro Ser Gln Pro Val His Val Leu  
20 25 30  
Ser Leu Leu Cys Ser His Leu Cys Pro Asn Glu Pro Arg Asp Thr His  
35 40 45  
Ala His Pro Tyr Val Val His Thr His Ser Cys Thr Arg Ser His Thr  
50 55 60  
Ser Thr Cys Ser Glu Ala Phe Val Cys Val Gly Ile Cys Ser Met Thr  
65 70 75 80  
Gln Asn Gly Val Trp Gly Gly Ala Ala Trp Leu Gly Arg Ser His Gln  
85 90 95  
Pro Ala Ser Glu Thr Leu Pro Thr Cys Pro Ser Trp Pro Arg His Cys  
100 105 110  
Val Ser Gly Leu Gly Phe Ser Pro Gly Pro Gln Asp Thr Pro Asp Lys  
115 120 125  
Glu Glu Leu Leu Ser Ser Glu Ala Cys Tyr Glu Cys Arg Ile Asn Gly

130 135 140  
Leu Ser Pro Arg Asp Arg Pro Arg Arg Ser Ala His Arg Asp His Gln  
145 150 155 160  
Val Thr Trp Val Leu His  
165

<210> 2455  
<211> 378  
<212> DNA  
<213> Homo sapiens

<400> 2455  
acgcgtcggc agaagcgtca gctgaccgtc ggagccgac tgtccccagg cgtcgtcagc  
60  
ggaaccgcgc agaaggaaat ccacgcgctg ccgatcatga aggcgctccc catgggcgctc  
120  
aaagaactcg ttctgggcga atcgaagtgg caggacgagt tgatcaacaa cttcatcgctc  
180  
gcgctgtttg caggcgtggt gttgctgttc gcggtgctgg tgctgctgta ccggcgcttg  
240  
ctgccgccgt tcatcaacgt gatgtcgctg gcggtggcac cgctgggcgg gttgatcggc  
300  
ctgtggctga ccaacacgcc gatctcgatg ccggtctata tcggcttgat catgctgctc  
360  
ggcatcgtcg ccaagaat  
378

<210> 2456  
<211> 126  
<212> PRT  
<213> Homo sapiens

<400> 2456  
Thr Arg Arg Gln Lys Arg Gln Leu Thr Val Gly Ala Asp Leu Ser Pro  
1 5 10 15  
Gly Val Val Ser Gly Thr Ala Gln Lys Glu Ile His Ala Leu Pro Ile  
20 25 30  
Met Lys Ala Leu Pro Met Gly Val Lys Glu Leu Val Leu Gly Glu Ser  
35 40 45  
Lys Trp Gln Asp Glu Leu Ile Asn Asn Phe Ile Val Ala Leu Phe Ala  
50 55 60  
Gly Val Val Leu Leu Phe Ala Val Leu Val Leu Leu Tyr Arg Arg Leu  
65 70 75 80  
Leu Pro Pro Phe Ile Asn Val Met Ser Leu Ala Val Ala Pro Leu Gly  
85 90 95  
Gly Leu Ile Gly Leu Trp Leu Thr Asn Thr Pro Ile Ser Met Pro Val  
100 105 110  
Tyr Ile Gly Leu Ile Met Leu Leu Gly Ile Val Ala Lys Asn  
115 120 125

<210> 2457  
<211> 754  
<212> DNA  
<213> Homo sapiens

<400> 2457  
 cctaggaatt taccaccatc aaagacttac attaaccagc tatccatgaa ctcacctgag  
 60  
 atgagcgaat gtgacatctt gcacactctg cgatgggtctt ctgggtccg gatcagctcc  
 120  
 tatgtcaact ggataaagga tcaccttatac aaacagggaa tgaaggctga gcatgctagc  
 180  
 tcgcttctag aactggcatc caccactaag tgtagctcag tgaaatatga tgttgaaata  
 240  
 gtagaggaat acttcgctcg acagatctca tccttctgta gtatcgactg tgccaccatc  
 300  
 ttgcagctgc atgaaattcc cagtctgcag tccatctaca cccttgatgc cgcgattcta  
 360  
 aaaggcccag gtcttttttg gatgagcatt tttctaagat ggctgctgag actgacctc  
 420  
 ataagtcgtc tgagattacc aagaacctac ttccagccac gctgcaactc attgacacct  
 480  
 atgcatcggt caccagagcc tatttgctgc aaaactttaa tgaagagggg acaactgaga  
 540  
 aaccttccaa ggagaaactg caaggctttg ctgctgtttt ggctattggc tctagcaggt  
 600  
 gcaaggcaaa tactctgggt ccgacactgg ttcagaattt gccatcgta gtgcagactg  
 660  
 tgtgtgagtc ctggaacaac atcaatacca atgaatttcc caatattgga tctggcgca  
 720  
 atgcctttgc caatgacacc atcccttcac gcgt  
 754

<210> 2458

<211> 236

<212> PRT

<213> Homo sapiens

<400> 2458  
 Met Asn Ser Pro Glu Met Ser Glu Cys Asp Ile Leu His Thr Leu Arg  
 1 5 10 15  
 Trp Ser Ser Arg Leu Arg Ile Ser Ser Tyr Val Asn Trp Ile Lys Asp  
 20 25 30  
 His Leu Ile Lys Gln Gly Met Lys Ala Glu His Ala Ser Ser Leu Leu  
 35 40 45  
 Glu Leu Ala Ser Thr Thr Lys Cys Ser Ser Val Lys Tyr Asp Val Glu  
 50 55 60  
 Ile Val Glu Glu Tyr Phe Ala Arg Gln Ile Ser Ser Phe Cys Ser Ile  
 65 70 75 80  
 Asp Cys Ala Thr Ile Leu Gln Leu His Glu Ile Pro Ser Leu Gln Ser  
 85 90 95  
 Ile Tyr Thr Leu Asp Ala Ala Ile Leu Lys Gly Pro Gly Leu Phe Gly  
 100 105 110  
 Met Ser Ile Phe Leu Arg Trp Leu Leu Arg Leu Ile Leu Ile Ser Arg  
 115 120 125  
 Leu Arg Leu Pro Arg Thr Tyr Phe Gln Pro Arg Cys Asn Ser Leu Thr  
 130 135 140  
 Pro Met His Arg Ser Pro Glu Pro Ile Cys Cys Lys Thr Leu Met Lys

145		150		155		160
Arg	Glu	Gln	Leu	Arg	Asn	Leu
		165		170		175
Leu	Phe	Trp	Leu	Leu	Ala	Leu
		180		185		190
Arg	His	Trp	Phe	Arg	Ile	Cys
		195		200		205
Pro	Gly	Thr	Thr	Ser	Ile	Pro
		210		215		220
Ala	Met	Pro	Leu	Pro	Met	Thr
225			230			235

&lt;210&gt; 2459

&lt;211&gt; 382

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2459

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accggtgcac agatcgttct ggccgcgtgc actgccccgc tcaagcaaat cgctatcaac
60
gctggtcttg agggcggcgt cgtggctgag aaggctcgtg gtctgccccgc aggacagggc
120
ctcaacgcgg ccaatgacga gtatgtcgac atggttagagg ccggcatcat tgaccgggcc
180
aaggtgaccc gttcggctct gcagaacgcc gcgtccatcg cggccctggt cctcaccact
240
gaagccgtca tcgctgacaa gcccagacct gttaaggctc ccgctggcgg cggtgatatg
300
gacggtatgg gtggcatggg cggcatgatg tgatcgtgta ttgccttcgc tgatttgagt
360
gggatgccac tttgccccag gc
382

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&lt;210&gt; 2460

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2460

Thr	Gly	Ala	Gln	Ile	Val	Leu	Ala	Ala	Cys	Thr	Ala	Pro	Leu	Lys	Gln
1				5				10					15		
Ile	Ala	Ile	Asn	Ala	Gly	Leu	Glu	Gly	Gly	Val	Val	Ala	Glu	Lys	Val
		20				25						30			
Ala	Gly	Leu	Pro	Ala	Gly	Gln	Gly	Leu	Asn	Ala	Ala	Asn	Asp	Glu	Tyr
		35			40						45				
Val	Asp	Met	Val	Glu	Ala	Gly	Ile	Ile	Asp	Pro	Ala	Lys	Val	Thr	Arg
	50				55					60					
Ser	Ala	Leu	Gln	Asn	Ala	Ala	Ser	Ile	Ala	Ala	Leu	Phe	Leu	Thr	Thr
65			70					75					80		
Glu	Ala	Val	Ile	Ala	Asp	Lys	Pro	Glu	Pro	Val	Lys	Ala	Pro	Ala	Gly
		85				90						95			
Gly	Gly	Asp	Met	Asp	Gly	Met	Gly	Gly	Met	Gly	Gly	Met	Met		
		100				105						110			

<210> 2461  
 <211> 558  
 <212> DNA  
 <213> Homo sapiens

<400> 2461  
 tccggacaaa agggttcaat cgaagtatgg ttagcctttt ccaagtcgcc aggacggacc  
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 tgcaatgctg tttgtcgtca tgctcggggg caagcaccga cgggctaaaa tcgaaattca  
 120  
 cgatgtggta ttcgcagtcg cggatacgtc gcaacacacc tacaccaat tgcgcgacgg  
 180  
 ctgggttcggc agccctaagg tgtgcatatc gatgcgtgga tggccgtcga tggcgtcgcac  
 240  
 ggctggaaaag tcgaactcag ccagatggcg ccgcctgccg acgcgcacat cctgtacttc  
 300  
 atcaacctcg gcggctacga ggccaacgct tttggcgagg cccatcatta cctgctgggtg  
 360  
 gtcgcccggg acaaacagga agccaagcgc aaggggcagc ggcaaagtgt gcaacactgg  
 420  
 tcccaggccc acaccgatgg cgtaatggat atcgacgact gcttgccgat tgatctgggtg  
 480  
 gacggtcgct atgttcacct ggtgcaaggc ccgcaccagc cgatcatcca gcacaacgac  
 540  
 tacatcatcc tgccgcga  
 558

<210> 2462  
 <211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 2462  
 Met Val Ser Leu Phe Gln Val Ala Arg Thr Asp Leu Gln Cys Cys Leu  
 1 5 10 15  
 Ser Ser Cys Ser Gly Ala Ser Thr His Gly Leu Lys Ser Lys Phe Thr  
 20 25 30  
 Met Trp Tyr Ser Gln Ser Arg Ile Arg Cys Asn Thr Pro Thr Pro Asn  
 35 40 45  
 Cys Ala Thr Ala Gly Ser Ala Ala Leu Arg Cys Ala Tyr Arg Cys Val  
 50 55 60  
 Asp Gly Arg Arg Trp Arg Arg Arg Leu Glu Ser Arg Thr Gln Pro Asp  
 65 70 75 80  
 Gly Ala Ala Cys Arg Arg Ala Ser Pro Val Leu His Gln Pro Arg Arg  
 85 90 95  
 Leu Arg Gly Gln Arg Phe Trp Arg Gly Pro Ser Leu Pro Ala Gly Gly  
 100 105 110  
 Arg Pro Gly Gln Thr Gly Ser Gln Ala Gln Gly Ala Ala Ala Asn Val  
 115 120 125  
 Ala Thr Leu Val Pro Gly Pro His Arg Trp Arg Asn Gly Tyr Arg Arg  
 130 135 140  
 Leu Leu Ala Asp  
 145

<210> 2463  
<211> 333  
<212> DNA  
<213> Homo sapiens

<400> 2463  
cccagggggt aagccatgag cctgttgagc caagtggccc gggcgccgtt gagcgccaag  
60  
ttcggcctgc tgattattct gttatacgtc gcgctggcgc tgtgngcgcc gctgctggcg  
120  
ccctatggcg aaaccaggt ggtgggtgaa ggcttcgcgc cgtggagcgg ccagtttttg  
180  
ctgggcaccg ataacctggg gcgcgacatg ttcagccgcc tgatgtacgg cgcgcgcaat  
240  
accttgggca ttgccttctt gacgacgacg ctggcgtttc tgctcggtgg tttgagcggg  
300  
ttggtcgcgg cgatcaaggg cggttgggtc gac  
333

<210> 2464  
<211> 106  
<212> PRT  
<213> Homo sapiens

<400> 2464  
Met Ser Leu Leu Ser Gln Val Ala Arg Ala Pro Leu Ser Ala Lys Phe  
1 5 10 15  
Gly Leu Leu Ile Ile Leu Leu Tyr Val Ala Leu Ala Leu Xaa Ala Pro  
20 25 30  
Leu Leu Ala Pro Tyr Gly Glu Thr Gln Val Val Gly Glu Gly Phe Ala  
35 40 45  
Pro Trp Ser Gly Gln Phe Leu Leu Gly Thr Asp Asn Leu Gly Arg Asp  
50 55 60  
Met Phe Ser Arg Leu Met Tyr Gly Ala Arg Asn Thr Leu Gly Ile Ala  
65 70 75 80  
Phe Leu Thr Thr Thr Leu Ala Phe Leu Leu Gly Gly Leu Ser Gly Leu  
85 90 95  
Val Ala Ala Ile Lys Gly Gly Trp Val Asp  
100 105

<210> 2465  
<211> 434  
<212> DNA  
<213> Homo sapiens

<400> 2465  
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60  
atgaccagag gctggcggcc cacctggcag gaacagatgc cagctctgct gcagccatcg  
120  
ccccttgagc ggggtggctct gtgcctcttt ctgcactgct ggtgggtggg gctgttggt  
180  
gggtgatgga taccggctgc cagagatggc tcaggtgcca gctgctgggc tatctcaggc  
240



actggctgct gggctatctc ggggtgccggc tgctgggcta tctcaggcgc tggctgctgc  
300  
tgggctgtct cgggtgctgg ctggtgggac gtctcctgtc ctggcactgg gctctcgggt  
360  
gctgggtgcc agctgctgcc taccttgacac tgggctctgg gcactcactg cactcgggct  
420  
tttccatctc cgac  
434

<210> 2466  
<211> 82  
<212> PRT  
<213> Homo sapiens

<400> 2466  
Trp Ile Pro Ala Ala Arg Asp Gly Ser Gly Ala Ser Cys Trp Ala Ile  
1 5 10 15  
Ser Gly Thr Gly Cys Trp Ala Ile Ser Gly Ala Gly Cys Trp Ala Ile  
20 25 30  
Ser Gly Ala Gly Cys Cys Trp Ala Val Ser Gly Ala Gly Cys Trp Asp  
35 40 45  
Val Ser Cys Pro Gly Thr Gly Leu Ser Gly Ala Gly Cys Gln Leu Leu  
50 55 60  
Pro Thr Leu His Trp Ala Leu Gly Thr His Cys Thr Arg Ala Phe Pro  
65 70 75 80  
Ser Pro

<210> 2467  
<211> 306  
<212> DNA  
<213> Homo sapiens

<400> 2467  
atggactcca ccggcaccgg agcaggggggt aaggggaaga agggagcggc cgggcgcaag  
60  
gtcggcgggc caaggaagaa gtcggtgtcg aggtccgtga aggccggtct ccagttcccc  
120  
gtcggcgcga tcgggcgcta cttgaagaag ggccgctacg cgcagcgtgt cggcaccggc  
180  
gccccgtct acctcgccgc tgtcctcgaa tacctcgccg ctgaggttct ggagctcgcc  
240  
ggtaatgctg ccagggacaa caagaagact cgcattattc cgcgccacgt gcttctggcg  
300  
atccgg  
306

<210> 2468  
<211> 102  
<212> PRT  
<213> Homo sapiens

<400> 2468  
Met Asp Ser Thr Gly Thr Gly Ala Gly Gly Lys Gly Lys Lys Gly Ala

1 5 10 15  
Ala Gly Arg Lys Val Gly Gly Pro Arg Lys Lys Ser Val Ser Arg Ser  
20 25 30  
Val Lys Ala Gly Leu Gln Phe Pro Val Gly Arg Ile Gly Arg Tyr Leu  
35 40 45  
Lys Lys Gly Arg Tyr Ala Gln Arg Val Gly Thr Gly Ala Pro Val Tyr  
50 55 60  
Leu Ala Ala Val Leu Glu Tyr Leu Ala Ala Glu Val Leu Glu Leu Ala  
65 70 75 80  
Gly Asn Ala Ala Arg Asp Asn Lys Lys Thr Arg Ile Ile Pro Arg His  
85 90 95  
Val Leu Leu Ala Ile Arg  
100

&lt;210&gt; 2469

&lt;211&gt; 489

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2469

gccggcgtgg cacatggctt ccctgaagcc agcattgccc tggccaagga agctttgcag  
60  
aacagatgag atttcagctg ggacttgcag ccaagtggga tttggccttt tggggagaag  
120  
ggaaagggca ttcaaaggcc agggacagag tatggtcaaa ggcatggaga tgaggaagag  
180  
gggaccagag cagaggggtca ggttggaaag cgagttgggg tcaatctgca aaggggctga  
240  
cgtgccaggt aaaaaacagg agcacagttt agttttgtcg gatcatttca ggtggaaggg  
300  
cagtgggaat gttggagaaa acactttttg gtgtcgttac attgaatctg ctcatttata  
360  
agaataaaac tttatttcat agagttattg tatggctcaa aatagggtatg aagaattaag  
420  
aaaaagaatt ttagatttaa aatgaaaagg cacctacaaa agtagagtgg tagagttacc  
480  
aacgtggag  
489

&lt;210&gt; 2470

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2470

Met Ala Ser Leu Lys Pro Ala Leu Pro Trp Pro Arg Lys Leu Cys Arg  
1 5 10 15  
Thr Asp Glu Ile Ser Ala Gly Thr Cys Ser Gln Val Gly Phe Gly Leu  
20 25 30  
Leu Gly Arg Arg Glu Arg Ala Phe Lys Gly Gln Gly Gln Ser Met Val  
35 40 45  
Lys Gly Met Glu Met Arg Lys Arg Gly Pro Glu Gln Arg Val Arg Leu  
50 55 60  
Glu Ser Glu Leu Gly Ser Ile Cys Lys Gly Ala Asp Val Pro Gly Lys

```

65          70          75          80
Lys Gln Glu His Ser Leu Val Leu Ser Asp His Phe Arg Trp Lys Gly
          85          90          95
Ser Gly Asn Val Gly Glu Asn Thr Phe Trp Cys Arg Tyr Ile Glu Ser
          100          105          110
Ala His Leu
          115

```

<210> 2471  
 <211> 779  
 <212> DNA  
 <213> Homo sapiens

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<400> 2471
tggccatcct ccgtgacatg tacacttcca atatgccggt gtttgagccg ttcatagatc
60
ctcacatggg ggccttgac ttctttcaca gtgaggacct ctgcttcacg aggctcataa
120
gaagaggagc taaggactat tttgtcatgg gggcgccaat ccactgcacg ttctactata
180
attctctcat ttcctgaggg aatatcagct ccaagatgtg tccaggagtt cttaggataa
240
gcactgtaaa gatgaacttt cccataaacc ccaattgttc ctgggtcaat atgaattcca
300
ttcatacggg cacaaaagac tccctctgag gctctaagga gaatcagaag cttttgttcc
360
ttttctaagg gattttctaa agtaccactt ttcagctccc cgcttgcaat gaccatgcat
420
gccacactca gaacattgct tctgtccaca ggggaagtcta aggtcccatc cacatacagc
480
cctttgaaga attggaaaat ctgtatccac aaggacagtt ctgttgggta aaatgagaac
540
gtcatcccca gggcctggaa tggattgtt gtatcctccc cagccttctt caacaccttg
600
ccatgtttca gggagggacc attttaaagc tgattcaggg gcagaggtag aagctgaaat
660
agttgggggc ataccttcct tcacccggag aatgacttga acttggcctt cacctaaaac
720
cagataggtg agttgcctca gctggctatt gaagaaccag tcacagcctt ggttctggc
779

```

<210> 2472  
 <211> 181  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2472
Met Thr Phe Ser Phe Tyr Pro Thr Glu Leu Ser Leu Trp Ile Gln Ile
1          5          10          15
Phe Gln Phe Phe Lys Gly Leu Tyr Val Met Gly Thr Leu Asp Phe Pro
          20          25          30
Val Asp Arg Ser Asn Val Leu Ser Val Ala Cys Met Val Ile Ala Gly
          35          40          45
Gly Glu Leu Lys Val Gly Thr Leu Glu Asn Pro Leu Glu Lys Glu Gln

```

50 55 60  
Lys Leu Leu Ile Leu Leu Arg Ala Ser Glu Gly Val Phe Cys Asp Arg  
65 70 75 80  
Met Asn Gly Ile His Ile Asp Pro Gly Thr Ile Gly Val Tyr Gly Lys  
85 90 95  
Val His Leu Tyr Ser Ala Tyr Pro Lys Asn Ser Trp Thr His Leu Gly  
100 105 110  
Ala Asp Ile Ala Ser Gly Asn Glu Arg Ile Ile Val Glu Asp Ala Val  
115 120 125  
Asp Trp Arg Pro His Asp Lys Ile Val Leu Ser Ser Ser Tyr Glu  
130 135 140  
Pro His Glu Ala Glu Val Leu Thr Val Lys Glu Val Lys Gly His His  
145 150 155 160  
Val Arg Ile Tyr Glu Arg Leu Lys His Arg His Ile Gly Ser Val His  
165 170 175  
Val Thr Glu Asp Gly  
180

<210> 2473  
<211> 698  
<212> DNA  
<213> Homo sapiens

<400> 2473  
nngtgcacca agaaatggca gcctgacaag ctggtggtgg tatggactcg gcggaaccga  
60  
cgcatctgct ccaaggccca cagctggcag ccgnnggcac ccagaaccca taccggggca  
120  
ccgtggtgtg gatggtacnc tgagaatgtg gacatctctg tgaccctcta cagggacccc  
180  
cacgtggacc agtatgaggc caaagagtgg acatttatta ttgaaaatga gtctaagggg  
240  
cagcgggaagg tgctggccac ggccgaggtg gacctggccc gccatgccag ggcccgtgcc  
300  
ntgtccaagt ccnactgag gctgcggctg aagccaaagt cagtgaagac ggtgcaggct  
360  
gagctgagcc tcaactcttc cggggtgctg ctgcgggagg gccgtgccac ggacgatgac  
420  
atgcagagtc tcgcaagcct catgagtgtg aagcctagtg atgtgggcaa cttggatgac  
480  
tttgctgaga gtgatgaaga tgaggctcat ggcccaggag ccccgagggc ccgggctcga  
540  
gtccccagc caggtgggct cacagcctgc tgtggatcga gactgccaaag acctggggag  
600  
ggaggggttac ccgggccacc agccacttgc tgtgcccgcc ctgtgatggg aactcattac  
660  
tgcccaggca gtcccaacca acccagcagc ctcaattg  
698

<210> 2474  
<211> 232  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 2474

Xaa Cys Thr Lys Lys Trp Gln Pro Asp Lys Leu Val Val Val Trp Thr  
 1 5 10 15  
 Arg Arg Asn Arg Arg Ile Cys Ser Lys Ala His Ser Trp Gln Pro Xaa  
 20 25 30  
 Ala Ser Arg Thr His Thr Gly Ala Pro Trp Cys Gly Trp Tyr Xaa Glu  
 35 40 45  
 Asn Val Asp Ile Ser Val Thr Leu Tyr Arg Asp Pro His Val Asp Gln  
 50 55 60  
 Tyr Glu Ala Lys Glu Trp Thr Phe Ile Ile Glu Asn Glu Ser Lys Gly  
 65 70 75 80  
 Gln Arg Lys Val Leu Ala Thr Ala Glu Val Asp Leu Ala Arg His Ala  
 85 90 95  
 Arg Ala Arg Ala Xaa Ser Lys Ser Xaa Leu Arg Leu Arg Leu Lys Pro  
 100 105 110  
 Lys Ser Val Lys Thr Val Gln Ala Glu Leu Ser Leu Thr Leu Ser Gly  
 115 120 125  
 Val Leu Leu Arg Glu Gly Arg Ala Thr Asp Asp Asp Met Gln Ser Leu  
 130 135 140  
 Ala Ser Leu Met Ser Val Lys Pro Ser Asp Val Gly Asn Leu Asp Asp  
 145 150 155 160  
 Phe Ala Glu Ser Asp Glu Asp Glu Ala His Gly Pro Gly Ala Pro Glu  
 165 170 175  
 Ala Arg Ala Arg Val Pro Gln Pro Gly Gly Leu Thr Ala Cys Cys Gly  
 180 185 190  
 Ser Arg Leu Pro Arg Pro Gly Glu Gly Gly Leu Pro Gly Pro Pro Ala  
 195 200 205  
 Thr Cys Cys Ala Arg Pro Val Met Gly Thr His Tyr Cys Pro Gly Ser  
 210 215 220  
 Pro Asn Gln Pro Ser Ser Leu Asn  
 225 230

&lt;210&gt; 2475

&lt;211&gt; 1251

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2475

ngcgcgcccc agatgcaggt gagcaagagg atgctggcgg ggggcgtgag gagcatgccc  
 60  
 agccccctcc tggcctgctg gcagcccatc ctctgctgg tgctgggctc agtgctgtca  
 120  
 ggctcggcca cgggctgccc gccccgctgc gaggctccg cccaggaccg cgctgtgctg  
 180  
 tgccaccgca agcgctttgt ggcagtcctc gagggcatcc ccaccgagac gcgcctgctg  
 240  
 gacctaggca agaaccgcat caaaacgctc aaccaggacg agttcgccag cttcccgcac  
 300  
 ctggaggagc tggagctcaa cgagaacatc gtgagcgccg tggagcccgg cgccttcaac  
 360  
 aacctcttca acctccggac gctgggtctc cgcagcaacc gcctgaagct catcccgtta  
 420  
 ggcgcttcca ctggcctcag caacctgacc aagctggaca tcagcgagaa caagatcggt  
 480

atcctactgg actacatgtt tcaggacctg tacaacctca agtcactgga ggttggcgac  
 540  
 aatgacctcg tctacatctc tcaacgcgcc ttacagcgcc tcaacagcct ggagcagctg  
 600  
 acgctggaga aatgcaacct gacctccatc cccaccgagg cgctgtccca cctgcacggc  
 660  
 ctcctcgtcc tgaggctccg gcacctcaac atcaatgcc a tccgggacta ctccttcaag  
 720  
 aggctgtacc gactcaaggt cttggagatc tccactggc cctacttga caccatgaca  
 780  
 cccaactgcc tctacggcct caacctgacg tccctgtcca tcacacactg caatctgacc  
 840  
 gctgtgccct acctggcgt cgcacaccta gtctatctcc gcttctcaa cctctctac  
 900  
 aaccccatca gcaccattga gggctccatg ttgcatgagc tgctccggct gcaggagatc  
 960  
 cagctggtgg gcgggcagct ggccgggtgg agccctgcct tccgggcct caactacctg  
 1020  
 cgcgtgctca atgtctctgg caaccagctg accacactgg aggaatcagt cttccactcg  
 1080  
 gtgggcaacc tggagacact catcctggac tccaaccgc tggcctgcga ctgtcggctc  
 1140  
 ctgtgggtgt tccggcgccg tggcctacaa acttcaaccg gcagcagccc acgtgcgcca  
 1200  
 cgcccgagtt tgtccagggg caaggagttc aaggacttcc ctgatgtgct a  
 1251

&lt;210&gt; 2476

&lt;211&gt; 417

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2476

Xaa	Ala	Pro	Glu	Met	Gln	Val	Ser	Lys	Arg	Met	Leu	Ala	Gly	Gly	Val
1				5				10						15	
Arg	Ser	Met	Pro	Ser	Pro	Leu	Leu	Ala	Cys	Trp	Gln	Pro	Ile	Leu	Leu
			20					25					30		
Leu	Val	Leu	Gly	Ser	Val	Leu	Ser	Gly	Ser	Ala	Thr	Gly	Cys	Pro	Pro
		35				40				45					
Arg	Cys	Glu	Cys	Ser	Ala	Gln	Asp	Arg	Ala	Val	Leu	Cys	His	Arg	Lys
	50					55				60					
Arg	Phe	Val	Ala	Val	Pro	Glu	Gly	Ile	Pro	Thr	Glu	Thr	Arg	Leu	Leu
65					70				75					80	
Asp	Leu	Gly	Lys	Asn	Arg	Ile	Lys	Thr	Leu	Asn	Gln	Asp	Glu	Phe	Ala
			85					90						95	
Ser	Phe	Pro	His	Leu	Glu	Glu	Leu	Glu	Leu	Asn	Glu	Asn	Ile	Val	Ser
			100					105					110		
Ala	Val	Glu	Pro	Gly	Ala	Phe	Asn	Asn	Leu	Phe	Asn	Leu	Arg	Thr	Leu
		115					120					125			
Gly	Leu	Arg	Ser	Asn	Arg	Leu	Lys	Leu	Ile	Pro	Leu	Gly	Val	Phe	Thr
		130				135					140				
Gly	Leu	Ser	Asn	Leu	Thr	Lys	Leu	Asp	Ile	Ser	Glu	Asn	Lys	Ile	Val
145				150					155					160	
Ile	Leu	Leu	Asp	Tyr	Met	Phe	Gln	Asp	Leu	Tyr	Asn	Leu	Lys	Ser	Leu

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<210> 2477
<211> 548
<212> DNA
<213> Homo sapiens
```

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<400> 2477
nagactgcga tcagacgcgc gtgccagct gaaccaggtg cgtgagaagg ctgccttcag
60
gtggccgggg gctccctcca gctgtctctg gacggaggga cgggaagtgg ccagaagggg
120
aagtgtgagg agttcccgtc cagcctgtca tcagtctccc caggtcttga agcggcggcc
180
ctgctcctgg ccgtgaccat ggaccctctg gagacccta tcaaggatgg catcctctac
240
cagcagcatg tcaagtttgg caagaagtgc tggcggaagg tgtgggctct gctgtatgca
300
ggaggcccat caggcgtggc acggctggag aactgggagg tccgggatgg tggcctggga
360
gcagcgggtg acaggtcggc ggggcctggc cggcgagggg agcgacgggt catccgcctg
420
```

gctgactgtg tgtccgtgct gccggctgac ggcgagagct gccccggga caccggtgcc  
480  
ttcctgctca ccaccaccga gcgaagccat ctactggctg ctcagcaccg ccaggcctgg  
540  
atggggccc  
548

<210> 2478<211> 113  
<212> PRT  
<213> Homo sapiens

<400> 2478  
Leu Glu Thr Pro Ile Lys Asp Gly Ile Leu Tyr Gln Gln His Val Lys  
1 5 10 15  
Phe Gly Lys Lys Cys Trp Arg Lys Val Trp Ala Leu Leu Tyr Ala Gly  
20 25 30  
Gly Pro Ser Gly Val Ala Arg Leu Glu Asn Trp Glu Val Arg Asp Gly  
35 40 45  
Gly Leu Gly Ala Ala Gly Asp Arg Ser Ala Gly Pro Gly Arg Arg Gly  
50 55 60  
Glu Arg Arg Val Ile Arg Leu Ala Asp Cys Val Ser Val Leu Pro Ala  
65 70 75 80  
Asp Gly Glu Ser Cys Pro Arg Asp Thr Gly Ala Phe Leu Leu Thr Thr  
85 90 95  
Thr Glu Arg Ser His Leu Leu Ala Ala Gln His Arg Gln Ala Trp Met  
100 105 110  
Gly

<210> 2479  
<211> 324  
<212> DNA  
<213> Homo sapiens

<400> 2479  
gaattcatgg aggtctatga ggaggatgaa gaatatgcgt atgaaaaata tgaaacccat  
60  
ttcggcacga gctggatgga ggagaccgca ggcaccttct cactgaactg gtatcgcagc  
120  
aggtactgga atgacaatga agcagcagaa aggcttgctg tgatgtgggc taaaaccttc  
180  
aaatatgcgt cgataaacgt ctccctggcag accgggatta gcaatagcga cgacgagggc  
240  
aatgaagatg aagacatggt ctacgccggt atctccattc cgctgggagg cggggcgtag  
300  
tctaactcct ggtatcgtga atat  
324

<210> 2480  
<211> 108  
<212> PRT  
<213> Homo sapiens

<400> 2480



Glu Phe Met Glu Val Tyr Glu Glu Asp Glu Glu Tyr Ala Tyr Glu Lys  
1 5 10 15  
Tyr Glu Thr His Phe Gly Thr Ser Trp Met Glu Glu Thr Ala Gly Thr  
20 25 30  
Phe Ser Leu Asn Trp Tyr Arg Ser Arg Tyr Trp Asn Asp Asn Glu Ala  
35 40 45  
Ala Glu Arg Leu Ala Leu Met Trp Ala Lys Thr Phe Lys Tyr Ala Ser  
50 55 60  
Ile Asn Val Ser Trp Gln Thr Gly Ile Ser Asn Ser Asp Asp Glu Gly  
65 70 75 80  
Asn Glu Asp Glu Asp Met Phe Tyr Ala Gly Ile Ser Ile Pro Leu Gly  
85 90 95  
Gly Gly Ala Tyr Ser Asn Ser Trp Tyr Arg Glu Tyr  
100 105

&lt;210&gt; 2481

&lt;211&gt; 484

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2481

gcgttcacta acgcttcaac aaactcttac aagcgtcttg ttcctgggtt cgaagcacct  
60  
gttatgttgg cttactcagc tcgtaaccgt tctgcttcta tccgtatccc atacgttgca  
120  
agccctaaag gcaagcgtat tgaagctcgt ttcctgata caaccgctaa cccataccta  
180  
gcattttcag ctatgttgat ggctgggtatc gatgggtatca aaaacaagat tcaccctggc  
240  
gatgcagcag acaaagattt gtacgacctt ccagctgaag aagcagccgc tatccctcaa  
300  
gttgctagca gcttagaaga agcgtttaag tgcctagatc aagaccgtga gttcttgact  
360  
caagggtggcg ttttctctga cgacatgata gatgcttaca tcgctcttaa agcagaagaa  
420  
gcacagcgtg ttgcaatgac aacaacacca cttgagttcg aactttacta cagcctataa  
480  
gctt  
484

&lt;210&gt; 2482

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2482

Ala Phe Thr Asn Ala Ser Thr Asn Ser Tyr Lys Arg Leu Val Pro Gly  
1 5 10 15  
Phe Glu Ala Pro Val Met Leu Ala Tyr Ser Ala Arg Asn Arg Ser Ala  
20 25 30  
Ser Ile Arg Ile Pro Tyr Val Ala Ser Pro Lys Gly Lys Arg Ile Glu  
35 40 45  
Ala Arg Phe Pro Asp Pro Thr Ala Asn Pro Tyr Leu Ala Phe Ser Ala  
50 55 60

```

Met Leu Met Ala Gly Ile Asp Gly Ile Lys Asn Lys Ile His Pro Gly
65          70          75          80
Asp Ala Ala Asp Lys Asp Leu Tyr Asp Leu Pro Ala Glu Glu Ala Ala
      85          90          95
Ala Ile Pro Gln Val Ala Ser Ser Leu Glu Glu Ala Leu Lys Cys Leu
      100         105         110
Asp Gln Asp Arg Glu Phe Leu Thr Gln Gly Gly Val Phe Ser Asp Asp
      115         120         125
Met Ile Asp Ala Tyr Ile Ala Leu Lys Ala Glu Glu Ala Gln Arg Val
      130         135         140
Ala Met Thr Thr Thr Pro Leu Glu Phe Glu Leu Tyr Tyr Ser Leu
145          150          155

```

&lt;210&gt; 2483

&lt;211&gt; 477

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2483

```

acgcgtgtta gccaaatctt ggttcctccc gttctctcct taccgagcc tgaggccctt
60
ctggagaaca ggcagcctct gaggaacct ctgatccccg atcagccacc ccacgcctg
120
cgtecccccagc cgcttctctcc tggccttggt ccccttccc tgtgaaggag agaacagttt
180
cggctggccc tgagatgctg gcaggcctgc agtcagggca gtgggcgcct cccacctga
240
aatggctcctt cgtggtgcag ttctgcttac ggggtagact ttgttgctt ccacagagga
300
cagttagggt gggcaggaag gaagtctctg ccacaagtct gcattccagg ctgtttccag
360
aagtgggaat tctctcgtgc cctggagtct gggaatgcat ttttagtttc ccagcttcag
420
gtagaattga aattgagtga gccaacccac cacatccatc tggagccagg aactagt
477

```

&lt;210&gt; 2484

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2484

```

Met His Ser Gln Thr Pro Gly His Glu Arg Ile Pro Thr Ser Gly Asn
1          5          10          15
Ser Leu Glu Cys Arg Leu Val Ala Glu Thr Ser Phe Leu Pro Thr Leu
      20          25          30
Thr Val Leu Cys Gly Arg Gln Gln Ser Leu Pro Arg Lys Gln Asn Cys
      35          40          45
Thr Thr Lys Asp His Phe Lys Val Gly Gly Ala His Cys Pro Asp Cys
      50          55          60
Arg Pro Ala Ser Ile Ser Gly Pro Ala Glu Thr Val Leu Ser Phe Thr
65          70          75          80
Gly Lys Gly Glu Gln Gly Gln Glu Glu Ala Ala Gly Asp Ala Gly Asp
      85          90          95

```

Gly Val Ala Asp Arg Gly Ser Glu Val Ser Ser Glu Ala Ala Cys Ser  
                   100                  105                  110  
 Pro Glu Gly Pro Gln Ala Arg Val Arg Arg Glu Arg Glu Glu Pro Arg  
                   115                  120                  125  
 Phe Gly  
           130

<210> 2485  
 <211> 608  
 <212> DNA  
 <213> Homo sapiens

<400> 2485  
 accggtgagg cgaagtgcgg tggcaattac gcagcttcgc tgcgttccca gatcgatgcc  
 60  
 aagaccgcg actgcaacga ggtgctcttt gtcgatgcag ttgaacatcg ctggatcgag  
 120  
 gagctgggtg gtatgaactt catggccatc agcaaagacg gtcagctcgt ccccccgag  
 180  
 ctactgggca ccactctgcg tggcgtgacc cgcaagtcca ttctggaagt tgccccgac  
 240  
 ctcggtcttg aaccagtgga ggcgaagatc gatgttgacg agctccttga tggcgttcgc  
 300  
 tctggcgagt tcccggaagt cttgcctgt ggtaccgccg cggttgtcac accgatcggc  
 360  
 tctttcctag atggagatac cgacgtgaag gtctctgagc ccaccgaaa gaccacgatg  
 420  
 gagatccgtc gccgtctgct ggatatccag ttcggacgcg ctgaggacac ccattggctgg  
 480  
 ttgaagcgag tctgctgacg gcgtcgacga ccattggggc cggccccaat gatgtgttca  
 540  
 cgatcgggct acgacggtgt cgatgacaat gtcttgccgc tggaaggttt gcccgcggt  
 600  
 gaacgcgt  
 608

<210> 2486  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<400> 2486  
 Thr Gly Glu Ala Lys Cys Gly Gly Asn Tyr Ala Ala Ser Leu Arg Ser  
   1                  5                  10                  15  
 Gln Ile Asp Ala Lys Thr Arg Asp Cys Asn Glu Val Leu Phe Val Asp  
           20                  25                  30  
 Ala Val Glu His Arg Trp Ile Glu Glu Leu Gly Gly Met Asn Phe Met  
           35                  40                  45  
 Ala Ile Ser Lys Asp Gly Gln Leu Val Thr Pro Glu Leu Ala Gly Thr  
           50                  55                  60  
 Ile Leu Arg Gly Val Thr Arg Lys Ser Ile Leu Glu Val Ala Pro Asp  
   65                  70                  75                  80  
 Leu Gly Leu Glu Pro Val Glu Arg Lys Ile Asp Val Asp Glu Leu Leu  
                   85                  90                  95

Asp Gly Val Arg Ser Gly Glu Phe Pro Glu Val Phe Ala Cys Gly Thr  
100 105 110  
Ala Ala Val Val Thr Pro Ile Gly Ser Phe Leu Asp Gly Asp Thr Asp  
115 120 125  
Val Lys Val Ser Glu Pro Thr Gly Lys Thr Thr Met Glu Ile Arg Arg  
130 135 140  
Arg Leu Leu Asp Ile Gln Phe Gly Arg Ala Glu Asp Thr His Gly Trp  
145 150 155 160  
Leu Lys Arg Val Cys  
165

&lt;210&gt; 2487

&lt;211&gt; 339

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2487

nncccctcag gagagcagcc catggaaggt cccccccaag gggcccctga gagccctgac  
60  
agtctgcaaa gaaaccagaa agagctccag ggcctcctga cccaggtgca agccctggag  
120  
aaggaggccg caagcagtgt ggacgtgcag gccctgcgga ggctctttga ggccgtgccc  
180  
cagctgggag gggctgctcc tcaggctcct gctgcccacc aaaagcccga ggcctcagtg  
240  
gagcaggcct ttggggagct gacacgggtc agcacggaag ttgctcaact gaaggaacag  
300  
accttggtaa ggctgctgga cattgaagag gctgtgcac  
339

&lt;210&gt; 2488

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2488

Xaa Pro Ser Gly Glu Gln Pro Met Glu Gly Pro Pro Gln Gly Ala Pro  
1 5 10 15  
Glu Ser Pro Asp Ser Leu Gln Arg Asn Gln Lys Glu Leu Gln Gly Leu  
20 25 30  
Leu Thr Gln Val Gln Ala Leu Glu Lys Glu Ala Ala Ser Ser Val Asp  
35 40 45  
Val Gln Ala Leu Arg Arg Leu Phe Glu Ala Val Pro Gln Leu Gly Gly  
50 55 60  
Ala Ala Pro Gln Ala Pro Ala Ala His Gln Lys Pro Glu Ala Ser Val  
65 70 75 80  
Glu Gln Ala Phe Gly Glu Leu Thr Arg Val Ser Thr Glu Val Ala Gln  
85 90 95  
Leu Lys Glu Gln Thr Leu Val Arg Leu Leu Asp Ile Glu Glu Ala Val  
100 105 110  
His

&lt;210&gt; 2489

<211> 594  
<212> DNA  
<213> Homo sapiens

<400> 2489  
naccggttct tcggactggc gacgatgctg atttctatcc cgacgggggt gaagctattt  
60  
aactggctgg tcaccatcta tcacggccgg gtgcgtatca ccagccaggt tctttggacc  
120  
ctgggcttca tggtagcctt cgggatcgga ggcacgaccg gcgtactgct ggccatcccc  
180  
ggtgctgact tcgtactgca caacagcctg ttcggaattg ctcacttcca caacgtgatc  
240  
atcggcggcg cagtattcgg ctacatcgca ggtttcagct tctacttccc gaaagcggtc  
300  
ggcttcaagc tgcacgaaag ctggggcaag gctgcattct gggtctggat ctcgggcttc  
360  
ttcgtcgcgt tcatgccgct ctatgcactg ggtttcatgg gcatgacccg ttgtttgaac  
420  
gcccccccca cccctgagtg ggtcccgtag ctgtacgttg ccatggtcgg tgcactgatg  
480  
atcgctgtcg gtatgcctg ccagttgatt cagctgtatg tcagcgtgcg tgatcgcaag  
540  
cagaacatgt gcgaatccgg cgacccatgg aatgcacaca ccctggaatg gtcg  
594

<210> 2490  
<211> 198  
<212> PRT  
<213> Homo sapiens

<400> 2490  
Xaa Ala Phe Phe Gly Leu Ala Thr Met Leu Ile Ser Ile Pro Thr Gly  
1 5 10 15  
Val Lys Leu Phe Asn Trp Leu Val Thr Ile Tyr His Gly Arg Val Arg  
20 25 30  
Ile Thr Ser Gln Val Leu Trp Thr Leu Gly Phe Met Val Thr Phe Ala  
35 40 45  
Ile Gly Gly Met Thr Gly Val Leu Leu Ala Ile Pro Gly Ala Asp Phe  
50 55 60  
Val Leu His Asn Ser Leu Phe Gly Ile Ala His Phe His Asn Val Ile  
65 70 75 80  
Ile Gly Gly Ala Val Phe Gly Tyr Ile Ala Gly Phe Ser Phe Tyr Phe  
85 90 95  
Pro Lys Ala Phe Gly Phe Lys Leu His Glu Ser Trp Gly Lys Ala Ala  
100 105 110  
Phe Trp Phe Trp Ile Ser Gly Phe Phe Val Ala Phe Met Pro Leu Tyr  
115 120 125  
Ala Leu Gly Phe Met Gly Met Thr Arg Cys Leu Asn Ala Pro Pro Thr  
130 135 140  
Pro Glu Trp Val Pro Tyr Leu Tyr Val Ala Met Val Gly Ala Leu Met  
145 150 155 160  
Ile Ala Val Gly Ile Ala Cys Gln Leu Ile Gln Leu Tyr Val Ser Val  
165 170 175

Arg Asp Arg Lys Gln Asn Met Cys Glu Ser Gly Asp Pro Trp Asn Ala  
                   180                  185                  190  
 His Thr Leu Glu Trp Ser  
                   195

<210> 2491  
 <211> 592  
 <212> DNA  
 <213> Homo sapiens

<400> 2491  
 acgcgtcacg caactgtcaa acttgccaat ccgcttgacg atactcgccc ctacctacgc  
 60  
 actacgttgt tgcttggtct attccatgca gtaacgacga atatgtcgcg atctcaggat  
 120  
 gatcttgacg tggtcgaaag cggaactgta ttccgcgccg tcaactccggc tgcggcaccg  
 180  
 cgtcccgggtg tcgacgagcg cccctccgat gaagtccttg ccgagatcga cgccgccttg  
 240  
 ccagcccagc cgcgcgatgct cgcggccgtg atctgtggca gctggctgcc cgatcgctgg  
 300  
 gatggagagt cggtaaggc tgactggcga cacgctgtgc tggtcgcccga gaaggctgct  
 360  
 gatgctcttg gcgtgaggct ggtgcgcaag gctgaccgtc aggctccatg gcaccccggt  
 420  
 cggtgtgctg ctctcatcgt cgatgggaag gtcattggcc atgctggtga gttgcacccc  
 480  
 acagtagtgt cgaaggctgg tctgcctcag cgcacctgtg cggtcgagtt caatctagat  
 540  
 gctttggtag cctgcgctcc gagcgggtgg gaggtcatgg ttatttcaag gt  
 592

<210> 2492  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 2492  
 Thr Arg His Ala Thr Val Lys Leu Ala Asn Pro Leu Asp Asp Thr Arg  
   1                  5                  10                  15  
 Pro Tyr Leu Arg Thr Thr Leu Leu Pro Gly Leu Phe His Ala Val Thr  
                   20                  25                  30  
 Thr Asn Met Ser Arg Ser Gln Asp Asp Leu Ala Val Phe Glu Ser Gly  
                   35                  40                  45  
 Thr Val Phe Arg Ala Val Thr Pro Ala Ala Ala Pro Arg Pro Gly Val  
                   50                  55                  60  
 Asp Glu Arg Pro Ser Asp Glu Val Leu Ala Glu Ile Asp Ala Ala Leu  
 65                  70                  75                  80  
 Pro Ala Gln Pro Arg Met Leu Ala Ala Val Ile Cys Gly Ser Trp Leu  
                   85                  90                  95  
 Pro Asp Arg Trp Asp Gly Glu Ser Val Lys Ala Asp Trp Arg His Ala  
                   100                  105                  110  
 Val Leu Val Ala Gln Lys Ala Ala Asp Ala Leu Gly Val Arg Leu Val  
                   115                  120                  125

Arg Lys Ala Asp Arg Gln Ala Pro Trp His Pro Gly Arg Cys Ala Ala  
 130 135 140  
 Leu Ile Val Asp Gly Lys Val Ile Gly His Ala Gly Glu Leu His Pro  
 145 150 155 160  
 Thr Val Val Ser Lys Ala Gly Leu Pro Gln Arg Thr Cys Ala Val Glu  
 165 170 175  
 Phe Asn Leu Asp Ala Leu Val Ala Cys Ala Pro Ser Gly Gly Glu Val  
 180 185 190  
 Met Val Ile Ser Arg  
 195

<210> 2493  
 <211> 418  
 <212> DNA  
 <213> Homo sapiens

<400> 2493  
 acgcgtcagg ttgccggtga tcgtgccacc gtcacctcca tgggtgccttc aggagcagac  
 60  
 cccacacact atgagccgtc gctgcgtgac gttcggaccg tcgtgtattc gagagtcgcg  
 120  
 ctatcgaact acctcatgct cgaacctcat tcggtcatca agaccatcga ctcttcccta  
 180  
 cctacgggat ctatcaatgt ctccctggct gaggaagccc aaaagtacgg cgcacaagtg  
 240  
 atcccgtctgg ttgaaaatgc caacctagac accgtgtggc tgggggttgcg cgtcattggc  
 300  
 aagggcgcca ggcggggagc cgaccgtctt tcctcgggtt acctccagct gacgtcggtg  
 360  
 gaggggcctg gggacttcac tgcctatatc actgggacct ttggtcgacc tcagatct  
 418

<210> 2494  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 2494  
 Thr Arg Gln Val Ala Gly Asp Arg Ala Thr Val Thr Ser Met Val Pro  
 1 5 10 15  
 Ser Gly Ala Asp Pro His Thr Tyr Glu Pro Ser Leu Arg Asp Val Arg  
 20 25 30  
 Thr Val Val Tyr Ser Arg Val Ala Leu Ser Asn Tyr Leu Met Leu Glu  
 35 40 45  
 Pro His Ser Val Ile Lys Thr Ile Asp Ser Ser Leu Pro Thr Gly Ser  
 50 55 60  
 Ile Asn Val Ser Leu Ala Glu Glu Ala Gln Lys Tyr Gly Ala Gln Val  
 65 70 75 80  
 Ile Pro Leu Val Glu Asn Ala Asn Leu Asp Thr Val Trp Leu Gly Leu  
 85 90 95  
 Arg Val Ile Gly Lys Gly Ala Arg Arg Gly Ala Asp Arg Ser Ser Ser  
 100 105 110  
 Val Tyr Leu Gln Leu Thr Ser Val Glu Gly Pro Gly Asp Phe Thr Ala  
 115 120 125

Tyr Ile Thr Gly Thr Phe Gly Arg Pro Gln Ile  
130 135

<210> 2495

<211> 1478

<212> DNA

<213> Homo sapiens

<400> 2495

nnggcctggc ccagttgcac cacgagcgct gcggacactc ggggcggcag tccgtctgtc  
60  
agtcctcccg ccaggtcccg cggcccgcac ctgccgcccg cacctgcagc tccgcacctg  
120  
cggccagtgc ctactgccct ctcttgccgc ccgcacctgc agccccgcac ctgccgcttg  
180  
cacctgcagc cccgcgtctt acccggttca agcatggctg accaggcgcc ctccgacacg  
240  
gacgtcaaca ccctgacctg cttcgtcatg gaggaggcca ggaaggcccg cggcacgggc  
300  
gagttgacct agctgctcaa ctcgctctgc acagcagtca aagccatctc ttcggcggtg  
360  
cgcaaggcgg gcacgcgca cctctatggc attgctggtt ctaccaacgt gacaggtgat  
420  
caagttaaga agctggacgt cctctccaac gacctggtta tgaacatgtt aaagtcattc  
480  
tttgccacgt gtgttctcgt gtcagaagaa gataaacacg ccatcatagt ggaaccggag  
540  
aaaaggggta aatatgtggt ctgttttgat ccccttgatg gatcttccaa catcgattgc  
600  
cttggtgccc ttggaacct ttttggcacc tatagaaaga aatcaactga tgagccttct  
660  
gagaaggatg ctctgcaacc aggcgggaac ctggtggcag ccggctacgc actgtatggc  
720  
agtgccacca tgctggctct tgccatggac tgtggggcca actgcttcat gctggacctg  
780  
gcatcgggg agttcatttt ggtggacaag gatgtgaaga taaaaaagaa aggtaaaatc  
840  
tacagcctta acgagggcta cgccaaggac tttgacctg ccgtcactga gtacatccag  
900  
aggaagaagt tccccccaga taattcagct ccttatgggg ccggtatgt gggctccatg  
960  
gtggtgatg ttcacgcac tctggtctac ggagggatat ttctgtacct cgctaacaag  
1020  
aagagcccca atggaaagct gagactgctg tacgaatgca accccatggc ctacgtcatg  
1080  
gagaaggctg ggggaatggc caccactggg aaggaggccg tgtagacgt cattcccaca  
1140  
gacattcacc agagggcgcc ggtgatcttg gggcccccg acgacgtgct cgagttcctg  
1200  
aaggtgtatg agaagcactc tgcccagtga gcacctgcc tgccctgcatc cggagaattg  
1260  
cctctacctg gaccttttgt ctcacacagc agtaccctga cctgctgtgc accttacatt  
1320



cctagagagc agaaataaaa agcatgacta tttccaccat caaatgctgt agaatgcttg  
 1380  
 gcactcccta accaaatgct gtctccataa tgccactggg gttaagatat attttgagtg  
 1440  
 gatggaggag aaataaactt attcctcctt aaaaaaaaa  
 1478

<210> 2496  
 <211> 338  
 <212> PRT  
 <213> Homo sapiens

<400> 2496  
 Met Ala Asp Gln Ala Pro Phe Asp Thr Asp Val Asn Thr Leu Thr Arg  
 1 5 10 15  
 Phe Val Met Glu Gly Arg Lys Ala Arg Gly Thr Gly Glu Leu Thr  
 20 25 30  
 Gln Leu Leu Asn Ser Leu Cys Thr Ala Val Lys Ala Ile Ser Ser Ala  
 35 40 45  
 Val Arg Lys Ala Gly Ile Ala His Leu Tyr Gly Ile Ala Gly Ser Thr  
 50 55 60  
 Asn Val Thr Gly Asp Gln Val Lys Lys Leu Asp Val Leu Ser Asn Asp  
 65 70 75 80  
 Leu Val Met Asn Met Leu Lys Ser Ser Phe Ala Thr Cys Val Leu Val  
 85 90 95  
 Ser Glu Glu Asp Lys His Ala Ile Ile Val Glu Pro Glu Lys Arg Gly  
 100 105 110  
 Lys Tyr Val Val Cys Phe Asp Pro Leu Asp Gly Ser Ser Asn Ile Asp  
 115 120 125  
 Cys Leu Val Ser Val Gly Thr Ile Phe Gly Ile Tyr Arg Lys Lys Ser  
 130 135 140  
 Thr Asp Glu Pro Ser Glu Lys Asp Ala Leu Gln Pro Gly Arg Asn Leu  
 145 150 155 160  
 Val Ala Ala Gly Tyr Ala Leu Tyr Gly Ser Ala Thr Met Leu Val Leu  
 165 170 175  
 Ala Met Asp Cys Gly Val Asn Cys Phe Met Leu Asp Pro Ala Ile Gly  
 180 185 190  
 Glu Phe Ile Leu Val Asp Lys Asp Val Lys Ile Lys Lys Lys Gly Lys  
 195 200 205  
 Ile Tyr Ser Leu Asn Glu Gly Tyr Ala Lys Asp Phe Asp Pro Ala Val  
 210 215 220  
 Thr Glu Tyr Ile Gln Arg Lys Lys Phe Pro Pro Asp Asn Ser Ala Pro  
 225 230 235 240  
 Tyr Gly Ala Arg Tyr Val Gly Ser Met Val Ala Asp Val His Arg Thr  
 245 250 255  
 Leu Val Tyr Gly Gly Ile Phe Leu Tyr Pro Ala Asn Lys Lys Ser Pro  
 260 265 270  
 Asn Gly Lys Leu Arg Leu Leu Tyr Glu Cys Asn Pro Met Ala Tyr Val  
 275 280 285  
 Met Glu Lys Ala Gly Gly Met Ala Thr Thr Gly Lys Glu Ala Val Leu 290  
 295 300  
 Asp Val Ile Pro Thr Asp Ile His Gln Arg Ala Pro Val Ile Leu Gly  
 305 310 315 320  
 Ser Pro Asp Asp Val Leu Glu Phe Leu Lys Val Tyr Glu Lys His Ser

325 330 335

Ala Gln

<210> 2497  
<211> 399  
<212> DNA  
<213> Homo sapiens

<400> 2497  
acgcgtgtct tggcgggtga aacccttccc gcagcagggt cagtacgtcg caccggcgag  
60  
cttggctacc tgccacagga tccccgcgac ccagacatgg aaatgatcg gagggcaagg  
120  
atcctgtcag cgcgtggcct ggaccacata ctggaacgga tgcgcaccct ggagtatcag  
180  
atggcgaacg gttccgagga cgaccgtgcc gttgcgatgg acaaatacgc gaaggctgaa  
240  
gaccgtctcg tcgcggccgg tggctatggc gcctctgcag aggcagcccg aatcgcgtcg  
300  
aacttggggc ttgacgaccg cgtcctttcc cagccgttga aaaacctctc ggggtggtcag  
360  
cgtcgtcgcg tcgagctggc gcgcatactc ttttccgga  
399

<210> 2498  
<211> 133  
<212> PRT  
<213> Homo sapiens

<400> 2498  
Thr Arg Val Leu Ala Gly Glu Thr Leu Pro Ala Ala Gly Ser Val Arg  
1 5 10 15  
Arg Thr Gly Glu Leu Gly Tyr Leu Pro Gln Asp Pro Arg Asp Pro Asp  
20 25 30  
Met Glu Met Ile Ala Arg Ala Arg Ile Leu Ser Ala Arg Gly Leu Asp  
35 40 45  
His Ile Leu Glu Arg Met Arg Thr Leu Glu Tyr Gln Met Ala Asn Gly  
50 55 60  
Ser Glu Asp Asp Arg Ala Val Ala Met Asp Lys Tyr Ala Lys Ala Glu  
65 70 75 80  
Asp Arg Leu Val Ala Ala Gly Gly Tyr Gly Ala Ser Ala Glu Ala Ala  
85 90 95  
Arg Ile Ala Ser Asn Leu Gly Leu Asp Asp Arg Val Leu Ser Gln Pro  
100 105 110  
Leu Lys Asn Leu Ser Gly Gly Gln Arg Arg Arg Val Glu Leu Ala Arg  
115 120 125  
Ile Leu Phe Ser Gly  
130

<210> 2499  
<211> 348  
<212> DNA  
<213> Homo sapiens

&lt;400&gt; 2499

nggccgggcg aagaccggtt ctatatggcc taccacgaca ccgagtgggg cgtgccggaa  
60  
tatgacgacc gcgcattgta cgagaagctc attctcgacg gattccaggc cggcctgtcg  
120  
tggatcacca tcctgcgcaa gcgcgacaac ttctgcaaag ccttcgacga tttccagccc  
180  
gagaagatag cgcgttacaa tgagaagaag gtccacgcgc tgatgaacga tgccggcatc  
240  
gtgcgcaacc gcgccaagat cgaaggcacg atcgccagcg cgaaggcgta tctcgacatc  
300  
atggaaaaag gcccgggctt ctccaggctg ctgtgggact tcgtcgac  
348

&lt;210&gt; 2500

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2500

Xaa	Pro	Gly	Glu	Asp	Pro	Phe	Tyr	Met	Ala	Tyr	His	Asp	Thr	Glu	Trp
1				5					10					15	
Gly	Val	Pro	Glu	Tyr	Asp	Asp	Arg	Ala	Leu	Tyr	Glu	Lys	Leu	Ile	Leu
			20					25					30		
Asp	Gly	Phe	Gln	Ala	Gly	Leu	Ser	Trp	Ile	Thr	Ile	Leu	Arg	Lys	Arg
		35					40				45				
Asp	Asn	Phe	Arg	Lys	Ala	Phe	Asp	Asp	Phe	Gln	Pro	Glu	Lys	Ile	Ala
	50					55				60					
Arg	Tyr	Asn	Glu	Lys	Lys	Val	His	Ala	Leu	Met	Asn	Asp	Ala	Gly	Ile
65				70					75					80	
Val	Arg	Asn	Arg	Ala	Lys	Ile	Glu	Gly	Thr	Ile	Ala	Ser	Ala	Lys	Ala
			85					90					95		
Tyr	Leu	Asp	Ile	Met	Glu	Lys	Gly	Pro	Gly	Phe	Ser	Arg	Leu	Leu	Trp
		100					105						110		
Asp	Phe	Val	Asp												
		115													

&lt;210&gt; 2501

&lt;211&gt; 569

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2501

gaattcgatt catttgtggc aaatgcttac aatttgatga ttgtaaccca tcaaatacaca  
60  
taatgcccac taagccactc catacacttc tttaaataagg aaaatatatg taaagtacgt  
120  
acttagcaca gggcctgacc tatagtaatg gtcaagaatg atagcggggg tgaggatatg  
180  
ctttcaagag tcaaacaatt ttactgggtgc atcatttcca tttattcttt ctcttttgca  
240  
taataaaacc actcttaaga ttctaccttg gttagttaga gacaacagtt ctctggaaag  
300

tagattctat agcttcaact ccctgaagag atgtgtgcta atttacatca aaaaaatcct  
360  
taagggtata aaatatgccca agaactgtca acatcacaga ttaccactgg tagcttctgg  
420  
tatattgtta agtttccact taatttttaa gggacactag agaattagta tgactcacct  
480  
acactaagtt tatatactgt atttaacagt gtaattttca aatatgacag gaataacca  
540  
gatgtgaaat gctgaatcat taatcacag  
569

<210> 2502  
<211> 100  
<212> PRT  
<213> Homo sapiens

<400> 2502  
Met Ile Ala Gly Val Arg Tyr Gly Phe Gln Glu Ser Asn Asn Phe Thr  
1 5 10 15  
Gly Ala Ser Phe Pro Phe Ile Leu Ser Leu Leu His Asn Lys Thr Thr  
20 25 30  
Leu Lys Ile Leu Pro Trp Leu Val Arg Asp Asn Ser Ser Leu Glu Ser  
35 40 45  
Arg Phe Tyr Ser Phe Asn Ser Leu Lys Arg Cys Val Leu Ile Tyr Ile  
50 55 60  
Lys Lys Ile Leu Lys Gly Ile Lys Tyr Ala Lys Asn Cys Gln His His  
65 70 75 80  
Arg Leu Pro Leu Val Ala Ser Gly Ile Leu Leu Ser Phe His Leu Ile  
85 90 95  
Phe Lys Gly His  
100

<210> 2503  
<211> 419  
<212> DNA  
<213> Homo sapiens

<400> 2503  
gccacgccag ccattctaccc tttcctcgac tcgccaaata agtattcact gaacatgtac  
60  
aaggccttgc tacctcagca gtcctacagc ttggcccagc cgtgtattc tccagtctgc  
120  
accaatgggg agcgttttct ctacctgccg ccacctcact acgtcgggtc ccacatccca  
180  
tcgtccttgg catcacccat gaggtctctg acaccttcgg cctccccagc catcccgct  
240  
ctcgtccatt gcgcagacaa aagcctcccg tggaagatgg gcgtcagccc tgggaatcct  
300  
gttgattccc acgcctatcc tcacatccag aacagtaagc agcccagggt tccctctgcc  
360  
aaggcgggtca ccagtggcct gccgggggac acagctctcc tggtgcccc ctcacgcgt  
419

<210> 2504

<211> 121  
<212> PRT  
<213> Homo sapiens

<400> 2504  
Met Tyr Lys Ala Leu Leu Pro Gln Gln Ser Tyr Ser Leu Ala Gln Pro  
1 5 10 15  
Leu Tyr Ser Pro Val Cys Thr Asn Gly Glu Arg Phe Leu Tyr Leu Pro  
20 25 30  
Pro Pro His Tyr Val Gly Pro His Ile Pro Ser Ser Leu Ala Ser Pro  
35 40 45  
Met Arg Leu Ser Thr Pro Ser Ala Ser Pro Ala Ile Pro Pro Leu Val  
50 55 60  
His Cys Ala Asp Lys Ser Leu Pro Trp Lys Met Gly Val Ser Pro Gly  
65 70 75 80  
Asn Pro Val Asp Ser His Ala Tyr Pro His Ile Gln Asn Ser Lys Gln  
85 90 95  
Pro Arg Val Pro Ser Ala Lys Ala Val Thr Ser Gly Leu Pro Gly Asp  
100 105 110  
Thr Ala Leu Leu Leu Pro Pro Ser Arg  
115 120

<210> 2505  
<211> 540  
<212> DNA  
<213> Homo sapiens

<400> 2505  
tccggagcca atccgactca ggccctcgtc tggagccagg tgctgttgag catgggggttg  
60  
ccgctcgtgt tgggtgccgtt ggctcgggttc accggcgatc ggcgtctgat gggccaatgg  
120  
acgaatgggc gtgtcatggc cgccatcgcg tggatcgtcg tggcagcagt ctcggctctc  
180  
aacgtgggttc tcgtcgtcga gacgggtcatg ggtgcatgat ccttgagggc agttttctgg  
240  
cgacaatcgt gaaaatgagt gacaaactca agcgggtgac gacgccgaac cccgcaccga  
300  
cctctgcccc cgagctagcc aacgatttgg ccaactgcatt tcgcgggtac cctgctggag  
360  
tggcgatcct cacgacgatg ggagcggctg ggcccagagg cttgacggtc tcctccctgg  
420  
cgtcgggtgc agtcgtcccc gctgttgtgt cgggtgctgtt gggtaatggt tcgacgaccc  
480  
tggccaccct gacggaggag tcccgcgtca tcgtccacat gcttgatgca gatcgcgcg  
540

<210> 2506  
<211> 72  
<212> PRT  
<213> Homo sapiens

<400> 2506  
Ser Gly Ala Asn Pro Thr Gln Ala Leu Val Trp Ser Gln Val Leu Leu

1 5 10 15  
Ser Met Gly Leu Pro Leu Val Leu Val Pro Leu Ala Arg Phe Thr Gly  
20 25 30  
Asp Arg Arg Leu Met Gly Gln Trp Thr Asn Gly Arg Val Met Ala Ala  
35 40 45  
Ile Ala Trp Ile Val Val Ala Ala Val Ser Ala Leu Asn Val Val Leu  
50 55 60  
Val Val Glu Thr Val Met Gly Ala  
65 70

&lt;210&gt; 2507

&lt;211&gt; 922

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2507

nacgcgtgaa gggcagagga gagagaccag tgaaggggga ggaggcgcc aaaaggagac  
60  
agcttcatgc cccagagaca taaatagccc ggctgctgca ggtacctgaa ggagttcagg  
120  
acggagcagt gccccctgtt ttcacagcac aagtgcgcgc agcaccggcc gttcacctgc  
180  
ttccactggc acttctcaa ccagcggcgc cgcaggcccc tccgcaggcg cgacggcacc  
240  
ttcaactaca gccccgacgt gtactgctcc aagtacaacg aagccaccgg cgtgtgcccc  
300  
gacggcgacg agtgtcccta cctgcaccgg acgacggggg acacagaacg caagtaccac  
360  
ctgcgttact acaaaacagg aacctgcac cagagacag acgcacgtgg ccaactgcgtg  
420  
aagaatgggc tgcactgtgc cttcgcgcac gggcccatg acctccgctc ccctgtctac  
480  
gacatcaggg agcttcaggc catggaggcc ttgcagaatg gccagaccac ggtagagggg  
540  
agcatagagg gccagtcggc tggggctgcg agccatgcca tgatagaaaa gatcctcagc  
600  
gaggagcctc ggtggcaaga gactgcttat gtgctgggga actataagac ggagccttgc  
660  
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720  
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780  
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840  
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900  
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922

&lt;210&gt; 2508

&lt;211&gt; 278

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2508

```

Pro Gly Cys Cys Arg Tyr Leu Lys Glu Phe Arg Thr Glu Gln Cys Pro
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Leu Phe Ser Gln His Lys Cys Ala Gln His Arg Pro Phe Thr Cys Phe
 20           25           30
His Trp His Phe Leu Asn Gln Arg Arg Arg Arg Pro Leu Arg Arg Arg
 35           40           45
Asp Gly Thr Phe Asn Tyr Ser Pro Asp Val Tyr Cys Ser Lys Tyr Asn
 50           55           60
Glu Ala Thr Gly Val Cys Pro Asp Gly Asp Glu Cys Pro Tyr Leu His
 65           70           75           80
Arg Thr Thr Gly Asp Thr Glu Arg Lys Tyr His Leu Arg Tyr Tyr Lys
 85           90           95
Thr Gly Thr Cys Ile His Glu Thr Asp Ala Arg Gly His Cys Val Lys
100          105          110
Asn Gly Leu His Cys Ala Phe Ala His Gly Pro His Asp Leu Arg Ser
115          120          125
Pro Val Tyr Asp Ile Arg Glu Leu Gln Ala Met Glu Ala Leu Gln Asn
130          135          140
Gly Gln Thr Thr Val Glu Gly Ser Ile Glu Gly Gln Ser Ala Gly Ala
145          150          155          160
Ala Ser His Ala Met Ile Glu Lys Ile Leu Ser Glu Glu Pro Arg Trp
165          170          175
Gln Glu Thr Ala Tyr Val Leu Gly Asn Tyr Lys Thr Glu Pro Cys Lys
180          185          190
Lys Pro Pro Arg Leu Cys Arg Gln Gly Tyr Ala Cys Pro Tyr Tyr His
195          200          205
Asn Ser Lys Asp Arg Arg Arg Ser Pro Arg Lys His Lys Tyr Arg Ser
210          215          220
Ser Pro Cys Pro Asn Val Lys His Gly Asp Glu Trp Gly Asp Pro Gly
225          230          235          240
Lys Cys Glu Asn Gly Asp Ala Cys Gln Tyr Cys His Thr Arg Thr Glu
245          250          255
Gln Gln Phe His Pro Glu Ile Tyr Lys Ser Thr Lys Cys Asn Gly Arg
260          265          270
Gly Gly Gly Val Arg Glu
275

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&lt;210&gt; 2509

&lt;211&gt; 348

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2509

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348

<210> 2510  
<211> 108  
<212> PRT  
<213> Homo sapiens

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Val His Glu Arg Val Glu Pro Gly Lys Thr Glu Thr Gln Pro Ile Leu  
35 40 45  
Gly Asp Ala Gly Arg Gln Val Ala Glu Gly Lys His Val Asp His Val  
50 55 60  
Arg Thr Asp Thr Thr Asp His Gly His Arg Ser Gln Arg Asn Leu Val  
65 70 75 80  
Asp Leu Ala Pro Gly Leu Val Arg Arg Val Ala Val Val Thr Thr Gly  
85 90 95  
Asp Leu Glu Leu Gly Ala Ser Lys Ser Ser Ala Val  
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<210> 2511  
<211> 663  
<212> DNA  
<213> Homo sapiens

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300  
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420  
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gac  
663



<210> 2512  
 <211> 221  
 <212> PRT  
 <213> Homo sapiens

<400> 2512  
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 20 25 30  
 Asn Glu Gln Asp Leu Gln Val Leu Pro Val Ile Ala His Val Gly Tyr  
 35 40 45  
 Pro Gln Ala Ala Asp Glu Tyr Tyr Gln Leu Leu Leu Ala Leu Arg Pro  
 50 55 60  
 Gly Arg Val Ala Gly Leu Ala Glu Ile Val Val Asn Gly Gln Pro Phe  
 65 70 75 80  
 Thr Val Thr Asp Ala Thr Glu Asp Glu Leu Ala Leu Thr Ala Trp Ala  
 85 90 95  
 Arg Ile Leu Leu Glu Gly Thr Pro Ile Ala Met Asp Gly Ser Trp Gln  
 100 105 110  
 Leu His Arg Arg Arg Ala Ala Pro Glu Pro Val Arg Phe Ala Lys Arg  
 115 120 125  
 Phe Gly Gly Glu Gln Ser Asn Thr Ser Ile Met Val Gly Asp Ala Ile  
 130 135 140  
 Ile Ile Lys Met Phe Arg Arg Leu Glu Pro Gly Asp Asn Leu Asp Ile  
 145 150 155 160  
 Thr Val His Ser Ala Leu Asn Asp Ala Gly Ile Ser Ser Val Ala Thr  
 165 170 175  
 Leu Tyr Gly Phe Met Ser Gly Gln Ile Pro Ala Glu Glu His Ile Pro  
 180 185 190  
 Val Asp Leu Ala Met Ile Ile Glu Arg Leu Pro Gln Pro Arg Asp Gly  
 195 200 205  
 Trp Glu Leu Ile Thr Ala Lys Ala Val Asp Leu Val Asp  
 210 215 220

<210> 2513  
 <211> 368  
 <212> DNA  
 <213> Homo sapiens

<400> 2513  
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 180  
 gctgcagcac atattcatcg ctacttgtgc ctggacaagt cggtcattga gctcagccga  
 240  
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 360

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368

<210> 2514  
<211> 93  
<212> PRT  
<213> Homo sapiens

<400> 2514  
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Ile Gln Arg Ala Asp Asp Ile Leu Asp Leu Lys Phe Cys Met Asp Gly  
35 40 45  
Val Gln Thr Ala Leu Arg Ser Glu Asp Tyr Glu Gln Ala Ala Ala His  
50 55 60  
Ile His Arg Tyr Leu Cys Leu Asp Lys Ser Val Ile Glu Leu Ser Arg  
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Gln Gly Lys Glu Gly Gln His Pro Lys Leu Glu His Asp  
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<210> 2515  
<211> 351  
<212> DNA  
<213> Homo sapiens

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120  
tatcagtcca tccctaaaag ccaaccaggc tctcccgagg gaggcaggaa atccctgctc  
180  
cctccatccc ccaccgggaa tgctgcaggg ggcttgaggg aggcgacaca gtggggagct  
240  
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351

<210> 2516  
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<212> PRT  
<213> Homo sapiens

<400> 2516  
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Thr Gly Gln Leu Glu Tyr Gln Ser Ile Pro Lys Ser Gln Pro Gly Ser  
20 25 30  
Pro Glu Gly Gly Arg Lys Ser Leu Leu Pro Pro Ser Pro Thr Gly Asn.  
35 40 45  
Ala Ala Gly Gly Leu Arg Glu Ala Thr Gln Trp Gly Ala Leu Gly Ala

50 55 60  
Gly Gly Gln Thr Met Gly Gln His Thr Pro Ser Ala Pro Leu Gln Tyr  
65 70 75 80  
Gln His Ser Arg Pro Thr His Leu Gly Pro Trp Ser Pro Gly Asp Leu  
85 90 95  
Thr Arg

<210> 2517  
<211> 356  
<212> DNA  
<213> Homo sapiens

<400> 2517  
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cctgtcacca accaaacccc atgggcctat tcagcagccc caacttggct ggtctggccg  
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aggccacaca ttccctgggg actgagctcc aagggtgctg gtccctgagc aggaagcggc  
240  
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356

<210> 2518  
<211> 103  
<212> PRT  
<213> Homo sapiens

<400> 2518  
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Ala Gly Gly Gly Ala Arg Ala Ser Pro Gly Val Arg Thr Cys His Gln  
20 25 30  
Pro Asn Pro Met Gly Leu Phe Ser Ser Pro Asn Leu Ala Gly Leu Ala  
35 40 45  
Glu Ala Thr His Ser Leu Gly Thr Glu Leu Gln Gly Ala Gly Ser Leu  
50 55 60  
Ser Arg Lys Arg Pro Val Leu Ser Gly Gln Cys Leu Thr Pro Ala Pro  
65 70 75 80  
Pro Ser Gln Ala Ser Ser Ser His Leu Pro Gln Ser Phe Pro Ser Arg  
85 90 95  
Pro Ser Ser Thr Gly Gln Thr  
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<210> 2519  
<211> 830  
<212> DNA  
<213> Homo sapiens

<400> 2519

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&lt;210&gt; 2520

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2520

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			20				25						30		
Leu	Pro	Cys	Trp	Gly	Arg	Cys	Ser	Ser	Ser	Phe	Gln	Arg	Arg	Lys	Arg
		35				40				45					
Gly	Trp	Gly	Val	Ala	Gly	Arg	Gly	Ser	Ser	Arg	Pro	Glu	Ser	Gln	Ser
	50				55					60					
Arg	Trp	Arg	Ala	Ala	Ser	Thr	Arg	Phe	Leu	Leu	Val	Gly	Leu	Arg	Gln
65				70				75						80	
Gly	Leu	Ala	Pro	Gly	Leu	Ser	Gly	Lys	Arg	Glu	Glu	Glu	Leu	Arg	Leu
			85				90							95	
Arg	Gly	Ala	Val	Leu	Pro	Arg	Arg	Leu	Thr	Gly					
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&lt;210&gt; 2521

&lt;211&gt; 4291

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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4291

&lt;210&gt; 2522

&lt;211&gt; 952

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2522

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Gly	Gly	Pro	Ala	Pro	Gly	Cys	Ser	Arg	Arg	Thr	Pro	Pro	Pro	Pro	Met
			20					25					30		
Ala	Pro	Leu	Ala	Leu	Val	Gly	Val	Thr	Leu	Leu	Leu	Ala	Ala	Pro	Pro
			35				40					45			
Cys	Ser	Gly	Ala	Ala	Thr	Pro	Thr	Pro	Ser	Leu	Pro	Pro	Pro	Pro	Ala
			50				55					60			
Asn	Asp	Ser	Asp	Thr	Ser	Thr	Gly	Gly	Cys	Gln	Gly	Ser	Tyr	Arg	Cys

65					70					75					80
Gln	Pro	Gly	Val	Leu	Leu	Pro	Val	Trp	Glu	Pro	Asp	Asp	Pro	Ser	Leu
				85					90					95	
Gly	Asp	Lys	Ala	Ala	Arg	Ala	Val	Val	Tyr	Phe	Val	Ala	Met	Val	Tyr
			100					105					110		
Met	Phe	Leu	Gly	Val	Ser	Ile	Ile	Ala	Asp	Arg	Phe	Met	Ala	Ala	Ile
		115				120					125				
Glu	Val	Ile	Thr	Ser	Lys	Glu	Lys	Glu	Ile	Thr	Ile	Thr	Lys	Ala	Asn
	130				135					140					
Gly	Glu	Thr	Ser	Val	Gly	Thr	Val	Arg	Ile	Trp	Asn	Glu	Thr	Val	Ser
145				150					155					160	
Asn	Leu	Thr	Leu	Met	Ala	Leu	Gly	Ser	Ser	Ala	Pro	Glu	Ile	Leu	Leu
			165					170						175	
Ser	Val	Ile	Glu	Val	Cys	Gly	His	Asn	Phe	Gln	Ala	Gly	Glu	Leu	Gly
		180						185				190			
Pro	Gly	Thr	Ile	Val	Gly	Ser	Ala	Ala	Phe	Asn	Met	Phe	Val	Val	Ile
	195					200					205				
Ala	Val	Cys	Ile	Tyr	Val	Ile	Pro	Ala	Gly	Glu	Ser	Arg	Lys	Ile	Lys
	210				215					220					
His	Leu	Arg	Val	Phe	Phe	Val	Thr	Ala	Ser	Trp	Ser	Ile	Phe	Ala	Tyr
225			230						235					240	
Val	Trp	Leu	Tyr	Leu	Ile	Leu	Ala	Val	Phe	Ser	Pro	Gly	Val	Val	Gln
		245						250					255		
Val	Trp	Glu	Ala	Leu	Leu	Thr	Leu	Val	Phe	Phe	Pro	Val	Cys	Val	Val
	260						265					270			
Phe	Ala	Trp	Met	Ala	Asp	Lys	Arg	Leu	Leu	Phe	Tyr	Lys	Tyr	Val	Tyr
	275					280					285				
Lys	Arg	Tyr	Arg	Thr	Asp	Pro	Arg	Ser	Gly	Ile	Ile	Ile	Gly	Ala	Glu
	290				295					300					
Gly	Asp	Pro	Pro	Lys	Ser	Ile	Glu	Leu	Asp	Gly	Thr	Phe	Val	Gly	Ala
305				310					315					320	
Glu	Ala	Pro	Gly	Glu	Leu	Gly	Gly	Leu	Gly	Pro	Gly	Pro	Ala	Glu	Ala
			325					330					335		
Arg	Glu	Leu	Asp	Ala	Ser	Arg	Arg	Glu	Val	Ile	Gln	Ile	Leu	Lys	Asp
	340							345				350			
Leu	Lys	Gln	Lys	His	Pro	Asp	Lys	Asp	Leu	Glu	Gln	Leu	Val	Gly	Ile
	355						360					365			
Ala	Asn	Tyr	Tyr	Ala	Leu	Leu	His	Gln	Gln	Lys	Ser	Arg	Ala	Phe	Tyr
	370				375					380					
Arg	Ile	Gln	Ala	Thr	Arg	Leu	Met	Thr	Gly	Ala	Gly	Asn	Val	Leu	Arg
385				390					395					400	
Arg	His	Ala	Ala	Asp	Ala	Ser	Arg	Arg	Ala	Ala	Pro	Ala	Glu	Gly	Ala
		405						410					415		
Gly	Glu	Asp	Glu	Asp	Asp	Gly	Ala	Ser	Arg	Ile	Phe	Phe	Glu	Pro	Ser
	420					425						430			
Leu	Tyr	His	Cys	Leu	Glu	Asn	Cys	Gly	Ser	Val	Leu	Leu	Ser	Val	Thr
	435					440					445				
Cys	Gln	Gly	Gly	Glu	Gly	Asn	Ser	Thr	Phe	Tyr	Val	Asp	Tyr	Arg	Thr
	450				455					460					
Glu	Asp	Gly	Ser	Ala	Lys	Ala	Gly	Ser	Asp	Tyr	Glu	Tyr	Ser	Glu	Gly
465				470					475					480	
Thr	Leu	Val	Phe	Lys	Pro	Gly	Glu	Thr	Gln	Lys	Glu	Leu	Arg	Ile	Gly
		485						490					495		
Ile	Ile	Asp	Asp	Asp	Ile	Phe	Glu	Glu	Asp	Glu	His	Phe	Phe	Val	Arg





930 935 940  
Ala Tyr Cys His Ile Arg Gly Phe  
945 950

<210> 2523  
<211> 392  
<212> DNA  
<213> Homo sapiens

<400> 2523  
nnnattacct acgttcgcac cctgtcagga ttgcctaca ccgcatttgt cgtggatgtc  
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ttcagccgaa aaattgttgg tgttgctaca cgctcgacga tgcgtaccga tgcgctgccc  
120  
atggaggctt tggagcatgc gttaacgact gcagggcgaa ttcatggaaa ccagttaatt  
180  
caccatagcg atcggggcag ccagtacgtg tcaactgaagt attccaccgc gtttagcgga  
240  
tccggaatcc gtccgagtgt gggaacagtc ggcgattctt atgacaatgc tctagccgaa  
300  
acagtcaacg gtctctacaa ggcggaactg attcatgccc aagggtccgtg gacgtcggtc  
360  
ggagaagtcg aattggccac cttgcggnnn nn  
392

<210> 2524  
<211> 130  
<212> PRT  
<213> Homo sapiens

<400> 2524  
Xaa Ile Thr Tyr Val Arg Thr Leu Ser Gly Phe Ala Tyr Thr Ala Phe  
1 5 10 15  
Val Val Asp Val Phe Ser Arg Lys Ile Val Gly Val Ala Thr Arg Ser  
20 25 30  
Thr Met Arg Thr Asp Ala Leu Pro Met Glu Ala Leu Glu His Ala Leu  
35 40 45  
Thr Thr Ala Gly Arg Ile His Gly Asn Gln Leu Ile His His Ser Asp  
50 55 60  
Arg Gly Ser Gln Tyr Val Ser Leu Lys Tyr Ser Thr Ala Leu Ala Glu  
65 70 75 80  
Ser Gly Ile Arg Pro Ser Val Gly Thr Val Gly Asp Ser Tyr Asp Asn  
85 90 95  
Ala Leu Ala Glu Thr Val Asn Gly Leu Tyr Lys Ala Glu Leu Ile His  
100 105 110  
Ala Gln Gly Pro Trp Thr Ser Val Gly Glu Val Glu Leu Ala Thr Leu  
115 120 125  
Arg Xaa  
130

<210> 2525  
<211> 378  
<212> DNA  
<213> Homo sapiens

<400> 2525  
acgcgttctc gggcgagggc atcgcagatt tcgaatgcac ggtgatggcg gtgtgccgca  
60  
tcccccttga atacgtggtg ctgtcaccgc cgcgggaatc aagaaccgca cgttgcgcaa  
120  
atcgctgcgc tacgcaccaa cgtgggtcggc aagatggttg tcagcggcga gccccgcnaa  
180  
tgattcatat ctccgatatc agcacgacag gggcgtcatt ccgctctgca catcggttg  
240  
gaagtcagcg gtgcgcccgc acgcctgcga tttcgggtga agacgcgcga ctaccattca  
300  
gaactggttg ccgcaacact cattcgcagc gagaagcccg ccgatttgcc caacacctat  
360  
caatacggcg tggaattc  
378

<210> 2526  
<211> 111  
<212> PRT  
<213> Homo sapiens

<400> 2526  
Met Ala Val Cys Arg Ile Pro Phe Glu Tyr Val Val Leu Ser Pro Pro  
1 5 10 15  
Arg Glu Ser Arg Thr Ala Arg Cys Ala Asn Arg Cys Ala Thr His Gln  
20 25 30  
Arg Gly Arg Gln Asp Val Gly Gln Arg Arg Ala Pro Xaa Met Ile His  
35 40 45  
Ile Ser Asp Ile Ser Thr Thr Gly Ala Ser Phe Arg Ser Ala His Arg  
50 55 60  
Leu Gly Ser Gln Arg Cys Ala Arg Thr Pro Ala Ile Ser Gly Glu Asp  
65 70 75 80  
Ala Arg Leu Pro Phe Arg Thr Gly Gly Arg Asn Thr His Ser Gln Arg  
85 90 95  
Glu Ala Arg Arg Phe Ala Gln His Leu Ser Ile Arg Arg Gly Ile  
100 105 110

<210> 2527  
<211> 305  
<212> DNA  
<213> Homo sapiens

<400> 2527  
ntggcacct tccgaatggg acggcggccc aaacccgaga tcatggccag caaagagcag  
60  
cagatccaga gagacgacct tggagccagt cccagagca gcagccagcc agaccacggc  
120  
cgctctctcc cccagaagc tcccgcaggg cccaccatct ccacggcctc cgagacctca  
180  
gtgtacgtga cctggattcc ccgtgggaat ggtgggttcc caatccagtc cttccgtgtg  
240  
gagtacaaga agctaaagaa agtgggagac tggattctgg ccaccagcgc catcccccca  
300

cgcggt  
305

<210> 2528  
<211> 101  
<212> PRT  
<213> Homo sapiens

<400> 2528  
Xaa Val Thr Phe Arg Met Gly Arg Arg Pro Lys Pro Glu Ile Met Ala  
1 5 10 15  
Ser Lys Glu Gln Gln Ile Gln Arg Asp Asp Leu Gly Ala Ser Pro Gln  
20 25 30  
Ser Ser Ser Gln Pro Asp His Gly Arg Leu Ser Pro Pro Glu Ala Pro  
35 40 45  
Asp Arg Pro Thr Ile Ser Thr Ala Ser Glu Thr Ser Val Tyr Val Thr  
50 55 60  
Trp Ile Pro Arg Gly Asn Gly Gly Phe Pro Ile Gln Ser Phe Arg Val  
65 70 75 80  
Glu Tyr Lys Lys Leu Lys Lys Val Gly Asp Trp Ile Leu Ala Thr Ser  
85 90 95  
Ala Ile Pro Pro Arg  
100

<210> 2529  
<211> 387  
<212> DNA  
<213> Homo sapiens

<400> 2529  
acgcgtctcc ccgtggtggg tcccgatccc ccggccgggt ctgccactga agcctctccc  
60  
tgtgtctctcc gtgccccccg agtggcctgc tagcccgctc tcccacacag tctccttgat  
120  
gtgaagtgtc acccggttg ctgcggcgtg tctccgccgt aacacgtgta taccggctca  
180  
gccatggcgg cggctgctgg gaaggctcct gcgtatggct ttgccatccg ggacccgggc  
240  
tttgcctgc aggggtgggc ttctgagcag aggaaggcca gaggtaacca ggtccatgca  
300  
cgtttgtgtc tttccacaat gtcgggcttt tatggatgct tttagtctca gtcacaaaag  
360  
ccatgagctc cacagggtcc tgaggga  
387

<210> 2530  
<211> 121  
<212> PRT  
<213> Homo sapiens

<400> 2530  
Met Ala Phe Val Thr Glu Thr Lys Ser Ile His Lys Ser Pro Thr Leu  
1 5 10 15  
Trp Lys Asp Thr Asn Val His Gly Pro Gly Tyr Leu Trp Pro Ser Ser

	20		25		30										
Ala	Gln	Lys	Pro	Thr	Pro	Ala	Glu	Gln	Ser	Pro	Gly	Pro	Gly	Trp	Gln
	35		40		45										
Ser	His	Thr	Gln	Glu	Pro	Ser	Gln	Gln	Pro	Pro	Pro	Trp	Leu	Ser	Arg
	50		55		60										
Tyr	Thr	Arg	Val	Thr	Ala	Glu	Thr	Arg	Arg	Ser	Lys	Pro	Gly	Asp	Thr
65			70		75				80						
Ser	His	Gln	Gly	Asp	Cys	Val	Gly	Glu	Arg	Ala	Ser	Arg	Pro	Leu	Gly
		85			90				95						
Gly	His	Gly	Gly	His	Arg	Glu	Arg	Leu	Gln	Trp	Gln	Ser	Arg	Pro	Gly
	100		105		110										
Asp	Arg	Asp	Pro	Pro	Arg	Gly	Asp	Ala							
	115		120												

&lt;210&gt; 2531

&lt;211&gt; 396

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2531

tctagagata caaaaagtac tctatacact gagagacatc tggataaata caaagggtga  
60gctttccaac cagctgaaga tgacaagact aaacccaag tcgctgcagc tctgtgtcat  
120ctcatcagca gccctggaga tgacaaagat agtgctgagg gggaacagac cttcgtcatc  
180agttaaagat atgctagctt ttctttttct tccagacatt cctgaatcca gagaactttc  
240ctgtaatgcg tcaaatacct taggtctcaa ttctttccct agagagacaa ggagcacagt  
300tcgttcccaa ggccccccat gcttggcgag ggcgctctctg ctttccaggc agggtcctgc  
360tgctccacc cacgtgcagg gaaaggaagg acgcgt  
396

&lt;210&gt; 2532

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2532

Met Thr Arg Leu Asn Pro Lys Ser Leu Gln Leu Cys Val Ile Ser Ser  
1 5 10 15Ala Ala Leu Glu Met Thr Lys Ile Val Leu Arg Gly Asn Arg Pro Ser  
20 25 30Ser Ser Val Lys Asp Met Leu Ala Phe Leu Phe Leu Pro Asp Ile Pro  
35 40 45Glu Ser Arg Glu Leu Ser Cys Asn Ala Ser Asn Pro Leu Gly Leu Asn  
50 55 60Ser Phe Pro Arg Glu Thr Arg Ser Thr Val Arg Ser Gln Gly Pro Pro  
65 70 75 80Cys Leu Ala Arg Ala Ser Leu Leu Ser Arg Gln Gly Pro Ala Ala Ser  
85 90 95

Thr His Val Gln Gly Lys Glu Gly Arg

100

105

<210> 2533  
<211> 495  
<212> DNA  
<213> Homo sapiens

<400> 2533  
ngccggccag atgtcccggg cgtgctggtg gccgggggct gtgcaggagt cctggcctgg  
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gctgtggcan ccccatgga cgtgatcaag tcgagactgc aggcagacgg gcagggccag  
120  
aggcgctacc ggggtctcct gcactgtatg gtgaccagcg ttcgagagga gggaccccg  
180  
gtccttttca aggggctggt actcaattgc tgccgcgcct tccctgtcaa catggtggtc  
240  
ttcgtcgct atgaggcagt gctgaggctc gccgggggct tgctcacata gccggteccc  
300  
acgcccagcg gccacccac cagcagctgc tggaggctcg agtggctgga ggaggcaagg  
360  
ggtagtggtg ctgggttcgg gacccacag ggccattgcc caggagaatg aggagcctcc  
420  
ctgcagtgtt gtcggccgag gcctgagctc gccctgccca gctactgacc tcaggtcgag  
480  
gggcccgcga gccat  
495

<210> 2534  
<211> 96  
<212> PRT  
<213> Homo sapiens

<400> 2534  
Xaa Arg Pro Asp Val Pro Gly Val Leu Val Ala Gly Gly Cys Ala Gly  
1 5 10 15  
Val Leu Ala Trp Ala Val Ala Xaa Pro Met Asp Val Ile Lys Ser Arg  
20 25 30  
Leu Gln Ala Asp Gly Gln Gly Gln Arg Arg Tyr Arg Gly Leu Leu His  
35 40 45  
Cys Met Val Thr Ser Val Arg Glu Glu Gly Pro Arg Val Leu Phe Lys  
50 55 60  
Gly Leu Val Leu Asn Cys Cys Arg Ala Phe Pro Val Asn Met Val Val  
65 70 75 80  
Phe Val Ala Tyr Glu Ala Val Leu Arg Leu Ala Arg Gly Leu Leu Thr  
85 90 95

<210> 2535  
<211> 1904  
<212> DNA  
<213> Homo sapiens

<400> 2535  
ncggcccggg aacgtggctg gttggaggag gtagatcacc ctttctgcgg gggacgattt  
60

cgtcggtggt aggctgctac catgagggtg aatcagaaca ccttgctgct ggggaagaag  
120  
gtggtccttg taccctacac ctccggagcat gtgccagca ggtaccacga gtggatgaaa  
180  
tcagaggagc tgcagcgttt gacagcctcg gagccgctga ccctggagca ggagtatgcc  
240  
atgcagtga gctggcagga agatgcagac aagtgtacct tcattgtgct ggatgccgag  
300  
aagtggcagg ccagccagg cgccaccgaa gagagctga tgggggaga cgtgaacctc  
360  
ttcctcacag atctagaaga cccaccttg ggggagatcg aggtcatgat tgcagagccc  
420  
agctgcaggg gtaagggcct tggcactgag gccgttctcg cgatgctgtc ttacggagtg  
480  
accacgctag gtctgaccaa gtttgaggct aaaattgggc aaggaaatga accaagcatc  
540  
cggatgttcc agaaacttca ctttgagcag gtggctacga gcagtgtttt tcaggagggtg  
600  
accctcagac tgacagtga tgagtccgag catcagtggc ttctggagca gaccagccac  
660  
gtggaagaga agccttacag agatgggtcg gcagagccct gctgatggct gggccttggtg  
720  
ggcagccact ctgtgtgagc aggggtgttg gccatacac ttcaaagacc agagccctgc  
780  
actgggagag tgctcctggc ccaggctggg aatcaccttt cgaggccctt cagactctgg  
840  
cggggcttgc tgtggcctcc ctccagctag tgggtgtggt gagcagactc cagggccagg  
900  
gccagtccc ttctcccctc ccggccaaac ccagaccag actctaggaa gctggaatgg  
960  
agggcagga tccatgggag atgtcgggat gaaggtggga gctggagggtg cagggggacc  
1020  
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1080  
tgggagtga gctccaggca ctaccagctt tcttgatttt cccgtttggt ccatgtgaag  
1140  
agctaccag agccccagcc tcacagtgtc cactcaaggg cagcttggtc ctcttgctct  
1200  
gcagaggcag gctggtgtga ccctgggaac ttgaccggg aacaacaggt ggtccagagt  
1260  
gagtgtggc tggccctca acctagtgtc cgtcctcctc tctcctggag ccagtcttga  
1320  
gtttaaggc attagtgtta gatacagctc cttgtggctg gaaaacaccc ctctgctgat  
1380  
aaagctcagg gggcactgag gaagcagagg ccccttgggg gtgccctcct gaagagagcg  
1440  
tcaggccatc agctctgtcc ctctggtgct cccacgtctg ttctcacc ccatctctg  
1500  
ggagcagctg cacctgactg gccacgagg ggcagtggag gcacaggctc agggtgccg  
1560  
ggctacctg caccctatgg cttacaaagt agagttggc cagtttcctt ccacctgagg  
1620  
gggactct gactcctaac agtcttctt gccctgcat catctggggg ggctggctgt  
1680

caagaaaggc cgggcatgct ttctaaacac agccacagga ggctttagg gcatcttcca  
1740  
ggtggggaaa cagtcttaga taagtaaggt gacttgccca aggcctccca gcacccttga  
1800  
tcttgagtc tcacagcaga ctgcatgtga acaactggaa ccgaaaacat gcctcagtat  
1860  
aaaacaaaca ttataaaacg aaaaaaaaaa aaaaaaaaag tact  
1904

<210> 2536  
<211> 207  
<212> PRT  
<213> Homo sapiens

<400> 2536  
Met Arg Leu Asn Gln Asn Thr Leu Leu Leu Gly Lys Lys Val Val Leu  
1 5 10 15  
Val Pro Tyr Thr Ser Glu His Val Pro Ser Arg Tyr His Glu Trp Met  
20 25 30  
Lys Ser Glu Glu Leu Gln Arg Leu Thr Ala Ser Glu Pro Leu Thr Leu  
35 40 45  
Glu Gln Glu Tyr Ala Met Gln Cys Ser Trp Gln Glu Asp Ala Asp Lys  
50 55 60  
Cys Thr Phe Ile Val Leu Asp Ala Glu Lys Trp Gln Ala Gln Pro Gly  
65 70 75 80  
Ala Thr Glu Glu Ser Cys Met Val Gly Asp Val Asn Leu Phe Leu Thr  
85 90 95  
Asp Leu Glu Asp Pro Thr Leu Gly Glu Ile Glu Val Met Ile Ala Glu  
100 105 110  
Pro Ser Cys Arg Gly Lys Gly Leu Gly Thr Glu Ala Val Leu Ala Met  
115 120 125  
Leu Ser Tyr Gly Val Thr Thr Leu Gly Leu Thr Lys Phe Glu Ala Lys  
130 135 140  
Ile Gly Gln Gly Asn Glu Pro Ser Ile Arg Met Phe Gln Lys Leu His  
145 150 155 160  
Phe Glu Gln Val Ala Thr Ser Ser Val Phe Gln Glu Val Thr Leu Arg  
165 170 175  
Leu Thr Val Ser Glu Ser Glu His Gln Trp Leu Leu Glu Gln Thr Ser  
180 185 190  
His Val Glu Glu Lys Pro Tyr Arg Asp Gly Ser Ala Glu Pro Cys  
195 200 205

<210> 2537  
<211> 509  
<212> DNA  
<213> Homo sapiens

<400> 2537  
acgcgttctc gtaaggacaa gcttgacgcc gaggtgcatg ccggtgaagg caccgccggg  
60  
gatgtcatcg tgctgcggtt ttccggagcc atggcgaagc gtcctgcctc agttatcctt  
120  
ccgctgctac tgctcgactc ccccgctcatt gcgtgggtggc ccttctccgg ccctgacaac  
180



ctcgctcgg accccategg agcccttgcg gaccgcgca tcaccgactc ggcagctgac  
 240  
 aaagatccgt gcaaagccct catacgccgt gcggtcacc taaccgaggg tgactccgac  
 300  
 ctgtgttggg ctgcaccac cagctggaga gccctagctg cagcagcttt ggatcaacat  
 360  
 ccagcgaccg tcaagtctgc tcgggtagag tcagccgccc gtaatgcgcc ggcgatgctg  
 420  
 ctggcagcct ggctaggatt gcgtctcggc gtcccggctg agcgggtgac aaccgacgcg  
 480  
 cccggcatct ccgcgacgt catgtcgac  
 509

<210> 2538

<211> 169

<212> PRT

<213> Homo sapiens

<400> 2538

Thr	Arg	Ser	Arg	Lys	Asp	Lys	Leu	Asp	Ala	Glu	Val	His	Ala	Gly	Glu
1				5					10					15	
Gly	Thr	Pro	Gly	Asp	Val	Ile	Val	Leu	Arg	Phe	Ser	Gly	Ala	Met	Ala
			20					25					30		
Lys	Arg	Pro	Ala	Ser	Val	Ile	Leu	Pro	Leu	Leu	Leu	Ser	Asp	Ser	Pro
		35					40					45			
Val	Ile	Ala	Trp	Trp	Pro	Phe	Ser	Gly	Pro	Asp	Asn	Leu	Ala	Ser	Asp
	50					55					60				
Pro	Ile	Gly	Ala	Leu	Ala	Asp	Arg	Arg	Ile	Thr	Asp	Ser	Ala	Ala	Asp
65					70				75					80	
Lys	Asp	Pro	Cys	Lys	Ala	Leu	Ile	Arg	Arg	Ala	Ala	His	Leu	Thr	Glu
			85					90					95		
Gly	Asp	Ser	Asp	Leu	Cys	Trp	Ala	Arg	Thr	Thr	Ser	Trp	Arg	Ala	Leu
			100					105					110		
Ala	Ala	Ala	Ala	Leu	Asp	Gln	His	Pro	Ala	Thr	Val	Lys	Phe	Ala	Arg
			115				120						125		
Val	Glu	Ser	Ala	Ala	Gly	Asn	Ala	Pro	Ala	Met	Leu	Leu	Ala	Ala	Trp
	130					135					140				
Leu	Gly	Leu	Arg	Leu	Gly	Val	Pro	Val	Glu	Arg	Val	Thr	Thr	Asp	Ala
145					150				155					160	
Pro	Gly	Ile	Ser	Ala	Ile	Val	Met	Ser							
					165										

<210> 2539

<211> 453

<212> DNA

<213> Homo sapiens

<400> 2539

aagcttctac tgccgcgagc acgtcgtcca ccgtcgaggt catggttcta gtttgccgcg  
 60  
 tcgcggcatg acccgaggat agtgacgtgg gacaatggct acgtgcgttt tctcaacgag  
 120  
 cagccgaact acgacctgac gtatgacgac gtcttcatgg caccaaaccg ttcctcggtg  
 180

gggtcccga tgaacgtga cctcacgtca acagacgggc taggcactcc tctgcccctc  
240  
gtagtggcca atatgaccgc aatttccgga cgtcgcattg cagagaccat cgccaggcgc  
300  
ggaggcattg ctgttctgcc ccaagatatc ccggcggatt tcgtcgcccg gtccattcgg  
360  
cgcgtaaaag atgcgcatac tcgattcgac accccagtca ccgtcaaccc gacaacgact  
420  
gtcgggtgagg ccatgaactt gctcaacaag cgc  
453

&lt;210&gt; 2540

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2540

Phe	Ala	Ala	Ser	Arg	His	Asp	Pro	Arg	Ile	Val	Thr	Trp	Asp	Asn	Gly
1				5					10					15	
Tyr	Val	Arg	Phe	Leu	Asn	Glu	Gln	Pro	Asn	Tyr	Asp	Leu	Thr	Tyr	Asp
		20						25					30		
Asp	Val	Phe	Met	Ala	Pro	Asn	Arg	Ser	Ser	Val	Gly	Ser	Arg	Met	Asn
		35					40					45			
Val	Asp	Leu	Thr	Ser	Thr	Asp	Gly	Leu	Gly	Thr	Pro	Leu	Pro	Leu	Val
	50					55				60					
Val	Ala	Asn	Met	Thr	Ala	Ile	Ser	Gly	Arg	Arg	Met	Ala	Glu	Thr	Ile
65				70					75					80	
Ala	Arg	Arg	Gly	Gly	Ile	Ala	Val	Leu	Pro	Gln	Asp	Ile	Pro	Ala	Asp
			85					90						95	
Phe	Val	Ala	Arg	Ser	Ile	Arg	Arg	Val	Lys	Asp	Ala	His	Thr	Arg	Phe
		100					105					110			
Asp	Thr	Pro	Val	Thr	Val	Asn	Pro	Thr	Thr	Thr	Val	Gly	Glu	Ala	Met
	115					120						125			
Asn	Leu	Leu	Asn	Lys	Arg										
	130														

&lt;210&gt; 2541

&lt;211&gt; 564

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2541

accggtctcc cacggagtcc tgtttcctca ggtactgcac tgtatacaac tctaaatgca  
60  
ccctgcatgg aaccattgc agggcacacg cagtctacat gtatcccagg ttttatgctc  
120  
acagagcctg caatactccg tgtctggaat acgttatttg ctgcacacct cccagaggaa  
180  
catgtaacgt ctgtgtaaca tgctatcctg cacacatctg aaagaatctg tgtacacaac  
240  
actattatgc tgtgcacaca tttcctcata ttctgtgtag agagcacctc attttgact  
300  
caaatattcg gcttcataa caagttacat tgctcacatc ttaaaatatt cattacacgt  
360

gaaaccaccg catggtaccg acatccttct ggaatgtccc gcacagaggc tgatatatgt  
420  
gcacagttct cactgttctg cgtgcccagc ccctcacact ggacgcccac ctcacactct  
480  
tctgccaagg gagactttgg ttctccccct ccctgtgctg gctgtgcggg ccacagtcct  
540  
ctgcacgcca gcagcatgac gcgt  
564

<210> 2542  
<211> 106  
<212> PRT  
<213> Homo sapiens

<400> 2542  
Met Leu Cys Thr His Phe Leu Ile Phe Cys Val Glu Ser Thr Ser Phe  
1 5 10 15  
Cys Thr Gln Ile Phe Gly Phe His Asn Lys Leu His Cys Ser His Leu  
20 25 30  
Lys Ile Phe Ile Thr Arg Glu Thr Thr Ala Trp Tyr Arg His Pro Ser  
35 40 45  
Gly Met Ser Arg Thr Glu Ala Asp Ile Cys Ala Gln Phe Ser Leu Phe  
50 55 60  
Cys Val Pro Ser Pro Ser His Trp Thr Pro Thr Ser His Ser Ser Ala  
65 70 75 80  
Lys Gly Asp Phe Gly Ser Pro Leu Pro Cys Ala Gly Cys Ala Gly His  
85 90 95  
Ser Pro Leu His Ala Ser Ser Met Thr Arg  
100 105

<210> 2543  
<211> 387  
<212> DNA  
<213> Homo sapiens

<400> 2543  
cgctgaagg gggcggggaa aatggaatgg gggggaaggg cgcggtggg gacatgctgg  
60  
aacgtgcca tgctttctgc accacactgg atgactgaag gggaaggaac gagcgtctta  
120  
ccgctcctga tgagattttt gtttttgcc aacaaagaaa tgtgtatgaa tgcacgtctg  
180  
tttgaggagg gagggagcctt ggaatagctg ccgacaacag ctggaactcc  
240  
tgtctgggtc cccagctgg gctagagagg gcagtgatca tctgtccact ggacaggaag  
300  
gtttgcaaag ggctgtttgc ttactgggtc ccaattttta gccttctgaa gcccctgtcc  
360  
aatggggccc agcaggcagc agtgctg  
387

<210> 2544  
<211> 122  
<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2544

```

Met Glu Trp Gly Gly Arg Ala Arg Val Gly Thr Cys Trp Asn Val Pro
 1           5           10           15
Met Leu Ser Ala Pro His Trp Met Thr Glu Gly Glu Gly Thr Ser Val
          20           25           30
Leu Pro Leu Leu Met Arg Phe Leu Phe Leu Pro Asn Lys Glu Met Cys
          35           40           45
Met Asn Ala Arg Leu Phe Ala Gly Ala Gly Arg Arg Arg Val Leu Gly
          50           55           60
Ile Ala Ala Asp Asn Ser Trp Asn Ser Cys Leu Gly Pro Pro Ala Gly
65           70           75           80
Leu Glu Arg Ala Val Ile Ile Cys Pro Leu Asp Arg Lys Val Cys Lys
          85           90           95
Gly Leu Phe Ala Tyr Trp Val Pro Ile Phe Ser Leu Leu Lys Pro Leu
          100          105          110
Ser Asn Gly Ala Gln Gln Ala Ala Val Leu
          115          120

```

&lt;210&gt; 2545

&lt;211&gt; 336

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2545

```

gcgattattt tcgtgctgcc cggacttatc atggtcggct ggtggtcagg tttcccgtac
60
tggaccaccc tcgctatctg tctagtcggc ggcacccctcg gcgttatgta ctcgattccg
120
ctgcgtcggg ccctcgtgac aggctcggat cttccctacc cggagggcgt cgcaggagct
180
gagggtgctca aagtaggcga ttccgctggt gccgccgagg ctaacaaggt gggctctgca
240
gtcatcatcg tcggttctgt ggtctctgca gcgtacgccc tgttgctgga tcttaagctt
300
gtgaagtcgg cgctgaccaa gcctttcaag acggggc
336

```

&lt;210&gt; 2546

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2546

```

Ala Ile Ile Phe Val Leu Pro Gly Leu Ile Met Val Gly Trp Trp Ser
 1           5           10           15
Gly Phe Pro Tyr Trp Thr Thr Leu Ala Ile Cys Leu Val Gly Gly Ile
          20           25           30
Leu Gly Val Met Tyr Ser Ile Pro Leu Arg Arg Ala Leu Val Thr Gly
          35           40           45
Ser Asp Leu Pro Tyr Pro Glu Gly Val Ala Gly Ala Glu Val Leu Lys
          50           55           60
Val Gly Asp Ser Ala Gly Ala Ala Glu Ala Asn Lys Val Gly Leu Arg

```

```

65          70          75          80
Val Ile Ile Val Gly Ser Val Val Ser Ala Ala Tyr Ala Leu Leu Ser
          85          90          95
Asp Leu Lys Leu Val Lys Ser Ala Leu Thr Lys Pro Phe Lys Thr Gly
          100          105          110

```

<210> 2547  
 <211> 556  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2547
acgcgtgcac acacacacac gcaggcgtac acgctcacaa gtgcacacac acatatgagt
60
ttccacacac tctcaccata tcactttctc ttactttttt aaagacaggg cacttgcctt
120
tatggccaat aatattatgc ccaagctaca acattccgag tcaatcacaa aggttataaa
180
cttcatttga actgaagacc acctgtaagc acgcagctca aatgtttctca cctagaaatt
240
caagtttgtt ttggaaagtg gacttaacgg tcaaagaaaa aggcctggcc aacttcagag
300
agggacaccc agccttgcta cgttgcggtg cattatgtgg tgctgtgcta tccatagaga
360
aagaggagat gaaaaagatt ctacaaagag agatcaaact gcaagaaagc acaaagattt
420
catcaccaca atatgaaggc ctccttggtg taaatgactt ttttaggtcc caataagaaa
480
taccatctat tctatctgga attattttat tagcttcaaa ttttattcta agattcatac
540
tattcagatca tctaga
556

```

<210> 2548  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2548
Met Asn Leu Arg Ile Lys Phe Glu Ala Asn Lys Ile Ile Pro Asp Arg
1          5          10          15
Ile Asp Gly Ile Ser Tyr Trp Asp Leu Lys Lys Ser Phe Ile Pro Arg
          20          25          30
Arg Pro Ser Tyr Cys Gly Asp Glu Ile Phe Val Leu Ser Cys Ser Leu
          35          40          45
Ile Ser Leu Cys Arg Ile Phe Phe Ile Ser Ser Phe Ser Met Asp Ser
          50          55          60
Thr Ala Pro His Asn Asp Thr Gln Arg Ser Arg Ala Gly Cys Pro Ser
65          70          75          80
Leu Lys Leu Ala Arg Pro Phe Ser Leu Thr Val Lys Ser Thr Phe Gln
          85          90          95
Thr Gln Leu Glu Phe Leu Gly Glu Asn Ile
          100          105

```

<210> 2549  
<211> 435  
<212> DNA  
<213> Homo sapiens

<400> 2549  
nnccagcctc tctccgaccg cgtacgtatt gaatttgata aagaagccaa cacgggtggt  
60  
atcgatgata atgggtgctgg catgtctcgt gaagaagcca ttacaaactt aggtacgatt  
120  
gctaaatcgg gcacctcttc tttcttagag caattgagtg gcgatcagaa aaaagacagc  
180  
caacttattg gtcaattcgg tgtaggcttt tactctgctt tcatcggtgc tgataaagta  
240  
acagtagaaa cacgtcgcgc aggtgcgacg gaaaatgaag cggttcgctg ggtatctgat  
300  
ggttctggtg aatttactat tgagacgacg gataaagcga ctcgtggtac acgcattact  
360  
ttgcatctga aagcagatga aaaagatttc gcagacaact tccgtctacg ttcattagta  
420  
acaaaatatt ctgat  
435

<210> 2550  
<211> 145  
<212> PRT  
<213> Homo sapiens

<400> 2550  
Xaa Gln Pro Leu Ser Asp Arg Val Arg Ile Glu Phe Asp Lys Glu Ala  
1 5 10 15  
Asn Thr Val Val Ile Asp Asp Asn Gly Val Gly Met Ser Arg Glu Glu  
20 25 30  
Ala Ile Thr Asn Leu Gly Thr Ile Ala Lys Ser Gly Thr Ser Ser Phe  
35 40 45  
Leu Glu Gln Leu Ser Gly Asp Gln Lys Lys Asp Ser Gln Leu Ile Gly  
50 55 60  
Gln Phe Gly Val Gly Phe Tyr Ser Ala Phe Ile Val Ala Asp Lys Val  
65 70 75 80  
Thr Val Glu Thr Arg Arg Ala Gly Ala Thr Glu Asn Glu Ala Val Arg  
85 90 95  
Trp Val Ser Asp Gly Ser Gly Glu Phe Thr Ile Glu Thr Ile Asp Lys  
100 105 110  
Ala Thr Arg Gly Thr Arg Ile Thr Leu His Leu Lys Ala Asp Glu Lys  
115 120 125  
Asp Phe Ala Asp Asn Phe Arg Leu Arg Ser Leu Val Thr Lys Tyr Ser  
130 135 140  
Asp  
145

<210> 2551  
<211> 403  
<212> DNA  
<213> Homo sapiens

<400> 2551  
nngccggcca gcctcacatc agtctctccg ccccggggaa ggctcagcac tttaaatacga  
60  
ggactccact tctggggacg cctgggttcgt tgcgccacca ggcctaggct acgctccatg  
120  
ctccccagc aatctctgtc tacacctcct gcggcgccct gccctcctcc gaccccttcc  
180  
cagccannaa gtccccccac cccttcagag aagcagcctc aaattccaga agtggagggt  
240  
ccagcctccc cgcgaggtag cagccccaca gtcttctggg agccattgtg gccagggacg  
300  
gcctctggac tgccaggctg ggttggggac caggaacat cggctctactc aggtgtgagg  
360  
gggcaggctc ggctgcccc aaagttggct ccctcctgga can  
403

<210> 2552  
<211> 134  
<212> PRT  
<213> Homo sapiens

<400> 2552  
Xaa Pro Ala Ser Leu Thr Ser Val Ser Pro Pro Arg Gly Arg Leu Ser  
1 5 10 15  
Thr Leu Asn Arg Gly Leu His Phe Trp Gly Arg Leu Val Arg Ser Pro  
20 25 30  
Thr Arg Pro Arg Leu Arg Ser Met Leu Pro Gln Gln Ser Leu Ser Thr  
35 40 45  
Pro Pro Ala Ala Pro Cys Pro Pro Pro Thr Pro Phe Gln Pro Xaa Ser  
50 55 60  
Pro Pro Thr Pro Ser Glu Lys Gln Pro Gln Ile Pro Glu Val Glu Ala  
65 70 75 80  
Pro Ala Ser Pro Arg Gly Thr Ser Pro Thr Val Phe Trp Glu Pro Leu  
85 90 95  
Trp Pro Gly Thr Ala Ser Gly Leu Pro Gly Trp Val Gly Asp Gln Gly  
100 105 110  
Thr Ser Val Tyr Ser Gly Val Arg Gly Gln Val Trp Pro Ala Pro Lys  
115 120 125  
Leu Ala Pro Ser Trp Thr  
130

<210> 2553  
<211> 380  
<212> DNA  
<213> Homo sapiens

<400> 2553  
actagtgtcc ctataagaaa aggaaaggac caagacacag gaaagatgaa gcagagattg  
60  
gagagataca gcatggggcca aggagcactg ggagccagca gcagctggaa gaggcaggag  
120  
gcctcctccc tagaccgcac aggatgctac tgggtgagcc tgctgtcctg gaaaaggcgt  
180

gaagtctgcc tgagtgggca ggggcttctg cgcagcacc agcaaggcca aggtggaagg  
240  
gacctctctg gccctgtcc tggctccacc ctcagctgct ggcaggtggg tcaccaggcc  
300  
tctgccc aaa gaaactcctg caggcagctc tggacccct gtcttacaca ccttctcact  
360  
gagcctgcc gcatcccagn  
380

<210> 2554  
<211> 111  
<212> PRT  
<213> Homo sapiens

<400> 2554  
Met Lys Gln Arg Leu Glu Arg Tyr Ser Met Gly Gln Gly Ala Leu Gly  
1 5 10 15  
Ala Ser Ser Ser Trp Lys Arg Gln Glu Ala Ser Ser Leu Asp Arg Thr  
20 25 30  
Gly Cys Tyr Trp Val Ser Leu Leu Ser Trp Lys Arg Arg Glu Val Cys  
35 40 45  
Leu Ser Gly Gln Gly Leu Leu Arg Ser Thr Gln Gln Gly Gln Gly Gly  
50 55 60  
Arg Asp Pro Pro Gly Pro Cys Pro Gly Ser Thr Leu Ser Cys Trp Gln  
65 70 75 80  
Val Gly His Gln Ala Ser Ala Gln Arg Asn Ser Cys Arg Gln Leu Trp  
85 90 95  
Thr Pro Cys Leu Thr His Leu Leu Thr Glu Pro Ala Ser Ile Pro  
100 105 110

<210> 2555  
<211> 368  
<212> DNA  
<213> Homo sapiens

<400> 2555  
ntccgatgg aaaagtaaag accagcaata gccataacg ccattaacac atacccatat  
60  
atgttggttaa tgctgcccgg tagttcgggtg gcattcttca tgggcaatag tttaatggga  
120  
gataacgcga ataattgtag tgctgttcta gtgtcacag acctgggtcac ccaaataga  
180  
ggatttatat cctcccatat cctcattttt gtgtcgttg gcctcggcat tgtctttacc  
240  
gttgccactc gaggtgtaca gttccgcctc ttcgggcaca tgtggcacct catgctcgat  
300  
tcacggaagc aaaagggcac ctccctctcc agctctcaag cattcacagt gggctctcgat  
360  
cacgcggn  
368

<210> 2556  
<211> 102  
<212> PRT



&lt;213&gt; Homo sapiens

&lt;400&gt; 2556

```

Met Leu Leu Met Leu Pro Gly Ser Ser Val Ala Phe Phe Met Gly Asn
 1           5           10           15
Ser Leu Met Gly Asp Asn Ala Asn Asn Gly Ser Val Val Leu Val Leu
 20           25           30
Thr Asp Leu Val Thr Gln Ile Glu Gly Phe Ile Ser Ser His Ile Leu
 35           40           45
Ile Phe Val Leu Val Gly Leu Gly Ile Val Phe Thr Val Ala Thr Arg
 50           55           60
Gly Val Gln Phe Arg Leu Phe Gly His Met Trp His Leu Met Leu Asp
 65           70           75           80
Ser Arg Lys Gln Lys Gly Thr Ser Leu Ser Ser Ser Gln Ala Phe Thr
 85           90           95
Val Gly Leu Asp His Ala
          100

```

&lt;210&gt; 2557

&lt;211&gt; 408

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2557

```

atcactactc cagttggtga ggcagttctg ggtcgcatct taaatgtgat cggtgagccg
60
attgatgaga tgggccagc taacgcgaaa gaaaaatggg aaattcaccg tccagctcct
120
aaattcgaag accaagctgt taaagctgag atgttgatga ctggtattaa ggtcgttgat
180
cttcttgca cttacgcaaa ggggtggcaag atcggtctct tcggtggtgc gggcgtaggt
240
aaaacagttt tgattcaaga gttgattcgt aacatcgcta ctgagcacgg tggatactct
300
gtattcgcag gtgtcggcga gcgtactcgc gaaggtaacg atctttgggt tgagatgaaa
360
gaatcaggcg ttatcgcaaa gaccgcactt gtattcggtc agatgaat
408

```

&lt;210&gt; 2558

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2558

```

Ile Thr Thr Pro Val Gly Glu Ala Val Leu Gly Arg Ile Leu Asn Val
 1           5           10           15
Ile Gly Glu Pro Ile Asp Glu Met Gly Pro Val Asn Ala Lys Glu Lys
 20           25           30
Trp Glu Ile His Arg Pro Ala Pro Lys Phe Glu Asp Gln Ala Val Lys
 35           40           45
Ala Glu Met Leu Met Thr Gly Ile Lys Val Val Asp Leu Leu Ala Pro
 50           55           60
Tyr Ala Lys Gly Gly Lys Ile Gly Leu Phe Gly Gly Ala Gly Val Gly

```

```

65          70          75          80
Lys Thr Val Leu Ile Gln Glu Leu Ile Arg Asn Ile Ala Thr Glu His
          85          90          95
Gly Gly Tyr Ser Val Phe Ala Gly Val Gly Glu Arg Thr Arg Glu Gly
          100          105          110
Asn Asp Leu Trp Val Glu Met Lys Glu Ser Gly Val Ile Ala Lys Thr
          115          120          125
Ala Leu Val Phe Gly Gln Met Asn
          130          135

```

<210> 2559  
 <211> 389  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2559
tccttgaaga tgaacatctt tcggctgcaa actgaaaagg atttgaatcc tcagaaaaca
60
gcttttctga aagatcgact gaatgcaata caggaagagc attctaagga cctgaagctg
120
ttgcatctcg aagttatgaa tttgcgccag caactgagag ctgtaaaaga ggaagaagac
180
aaggcacaag atgaggtgca aagggtgact gccactctga agattgcctc gcagacaaaag
240
aagaatgcag ccattattga agaggaactg aagaccacaa aacgtaaaat gaaccttaaa
300
attcaagagc ttctagagat gacctcattt ccaagttggg tgaagaaaat aagaacctgc
360
aggatatctt tcaacaggaa catgaagaa
389

```

<210> 2560  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2560
Ser Leu Lys Met Asn Ile Phe Arg Leu Gln Thr Glu Lys Asp Leu Asn
1      5      10      15
Pro Gln Lys Thr Ala Phe Leu Lys Asp Arg Leu Asn Ala Ile Gln Glu
20     25     30
Glu His Ser Lys Asp Leu Lys Leu Leu His Leu Glu Val Met Asn Leu
35     40     45
Arg Gln Gln Leu Arg Ala Val Lys Glu Glu Glu Asp Lys Ala Gln Asp
50     55     60
Glu Val Gln Arg Leu Thr Ala Thr Leu Lys Ile Ala Ser Gln Thr Lys
65     70     75     80
Lys Asn Ala Ala Ile Ile Glu Glu Glu Leu Lys Thr Thr Lys Arg Lys
85     90     95
Met Asn Leu Lys Ile Gln Glu Leu Leu Glu Met Thr Ser Phe Pro Ser
100    105    110
Trp Leu Lys Lys Ile Arg Thr Cys Arg Ile Ser Phe Asn Arg Asn Met
115    120    125
Lys

```

<210> 2561  
<211> 429  
<212> DNA  
<213> Homo sapiens

<400> 2561  
nnactcacca ctgtgggtct actatgcctt ctgaccccggt cttggacttc aactgggaga  
60  
atgtggagcc atttgaacag gctcctcttc tggagcatat tttcttctgt cacttgtaga  
120  
aaagctgtat tggattgtga ggcaatgaaa acaaatgaat tcccttctcc atgtttggac  
180  
tcaaagacta aggtgggttat gaagggtcaa aatgtatcta tgttttgttc ccataagaac  
240  
aaatcactgc agatcaccta ttcattgttt cgacgtaaga cacacctggg aacctcaggat  
300  
ggaaaagggtg aacctgcgat ttttaacctt agcatcacag aagcccatga atcaggcccc  
360  
tacaaatgca aagcccaagt taccagctgt tcaaaataca gtcgtgactt cagcttcacg  
420  
attgtcgac  
429

<210> 2562  
<211> 143  
<212> PRT  
<213> Homo sapiens

<400> 2562  
Xaa Leu Thr Thr Val Val Leu Leu Cys Leu Leu Thr Pro Ser Trp Thr  
1 5 10 15  
Ser Thr Gly Arg Met Trp Ser His Leu Asn Arg Leu Leu Phe Trp Ser  
20 25 30  
Ile Phe Ser Ser Val Thr Cys Arg Lys Ala Val Leu Asp Cys Glu Ala  
35 40 45  
Met Lys Thr Asn Glu Phe Pro Ser Pro Cys Leu Asp Ser Lys Thr Lys  
50 55 60  
Val Val Met Lys Gly Gln Asn Val Ser Met Phe Cys Ser His Lys Asn  
65 70 75 80  
Lys Ser Leu Gln Ile Thr Tyr Ser Leu Phe Arg Arg Lys Thr His Leu  
85 90 95  
Gly Thr Gln Asp Gly Lys Gly Glu Pro Ala Ile Phe Asn Leu Ser Ile  
100 105 110  
Thr Glu Ala His Glu Ser Gly Pro Tyr Lys Cys Lys Ala Gln Val Thr  
115 120 125  
Ser Cys Ser Lys Tyr Ser Arg Asp Phe Ser Phe Thr Ile Val Asp  
130 135 140

<210> 2563  
<211> 267  
<212> DNA  
<213> Homo sapiens

<400> 2563  
ggatcccaga cgagtgcctgg cagcagtatg ggggccgtgg gggcgacggc caccgtcagc  
60  
accccggtca ccatccagaa catgacctcc tcttatgtca ccatcacatc ccatgtcctt  
120  
aaggccttta ccctttggga acaggcagag gccctcacia ggaagaacia agaattcttt  
180  
gtcagctca gcacaaaagt gcgcgtgttg gccctcaaca gcagcctggt ggacctggtg  
240  
cactacacia ggcagggcct ccagcgg  
267

<210> 2564  
<211> 89  
<212> PRT  
<213> Homo sapiens

<400> 2564  
Gly Ser Gln Thr Ser Ala Gly Ser Ser Met Gly Ala Val Gly Ala Thr  
1 5 10 15  
Ala Thr Val Ser Thr Pro Val Thr Ile Gln Asn Met Thr Ser Ser Tyr  
20 25 30  
Val Thr Ile Thr Ser His Val Leu Lys Ala Phe Thr Leu Trp Glu Gln  
35 40 45  
Ala Glu Ala Leu Thr Arg Lys Asn Lys Glu Phe Phe Ala Gln Leu Ser  
50 55 60  
Thr Lys Val Arg Val Leu Ala Leu Asn Ser Ser Leu Val Asp Leu Val  
65 70 75 80  
His Tyr Thr Arg Gln Gly Leu Gln Arg  
85

<210> 2565  
<211> 333  
<212> DNA  
<213> Homo sapiens

<400> 2565  
cttcgcactg ctccgcgagt tcttggggga gtgagcacag cgcgtaagct cagccacgtg  
60  
tggttcgaat tcgattcctt ggtcaatgcc cgtgacgtgg gcggaatccc caccctcgat  
120  
gggccggtga aatcccagcg actgatccgc agcgacaacc tgcaggccct caccgagggc  
180  
gacatcgccc agttgcagca actcgggtgtc tccgatgtgg tcgatctgcg ttccacctat  
240  
gaggtggcca gcgagggccc ggggccgctg accgggctg gggtgaccat ccaccccat  
300  
tccttcctgc ccgaccagca cgccaatgtg cac  
333

<210> 2566  
<211> 111  
<212> PRT

<213> Homo sapiens

<400> 2566

```

Leu Arg Thr Ala Pro Arg Val Leu Gly Gly Val Ser Thr Ala Arg Lys
 1           5           10           15
Leu Ser His Val Trp Phe Glu Phe Asp Ser Leu Val Asn Ala Arg Asp
      20           25           30
Val Gly Gly Ile Pro Thr Pro Asp Gly Pro Val Lys Ser Gln Arg Leu
      35           40           45
Ile Arg Ser Asp Asn Leu Gln Ala Leu Thr Glu Ala Asp Ile Ala Gln
      50           55           60
Leu Gln Gln Leu Gly Val Ser Asp Val Val Asp Leu Arg Ser Thr Tyr
65           70           75           80
Glu Val Ala Ser Glu Gly Pro Gly Pro Leu Thr Gly Arg Gly Val Thr
      85           90           95
Ile His Pro His Ser Phe Leu Pro Asp Gln His Ala Asn Val His
      100           105           110

```

<210> 2567

<211> 396

<212> DNA

<213> Homo sapiens

<400> 2567

```

ngaattcaaa ctggtgttcg tatgggccat aagcaaggta catatacgat gcgttttaga
60
agccagttca cagatcaacg tctattcgga accgatcaat ttagtattgg tgggcgctat
120
tctgtacgag gtttttagtgg agaagaaacc ttaagagggtg actcgggcta ttatgtacaa
180
aatgaatggg cattaccatt tagaaaacaa caaattactc catatgtagg gatagatatt
240
ggacatgtat gggggccatc tacagaaact caattaggta ataccttaat tgggtggtgta
300
gttggtgtac gtggtatggt tgggtgacgat gtaaaactatg atgtatcact aggaacacca
360
attaagaaac cagaaggttt tgatacagat acgcgt
396

```

<210> 2568

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2568

```

Xaa Ile Gln Thr Gly Val Arg Met Gly His Lys Gln Gly Thr Tyr Thr
 1           5           10           15
Met Arg Phe Arg Ser Gln Phe Thr Asp Gln Arg Leu Phe Gly Thr Asp
      20           25           30
Gln Phe Ser Ile Gly Gly Arg Tyr Ser Val Arg Gly Phe Ser Gly Glu
      35           40           45
Glu Thr Leu Arg Gly Asp Ser Gly Tyr Tyr Val Gln Asn Glu Trp Ala
      50           55           60
Leu Pro Phe Arg Lys Gln Gln Ile Thr Pro Tyr Val Gly Ile Asp Ile

```

65                                70                                75                                80  
 Gly His Val Trp Gly Pro Ser Thr Glu Thr Gln Leu Gly Asn Thr Leu  
                               85                                90                                95  
 Ile Gly Gly Val Val Gly Val Arg Gly Met Val Gly Asp Asp Val Asn  
                               100                                105                                110  
 Tyr Asp Val Ser Leu Gly Thr Pro Ile Lys Lys Pro Glu Gly Phe Asp  
                               115                                120                                125  
 Thr Asp Thr Arg  
                               130

<210> 2569

<211> 330

<212> DNA

<213> Homo sapiens

<400> 2569

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<210> 2570

<211> 110

<212> PRT

<213> Homo sapiens

<400> 2570

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 His Asn Asp Asp Glu Gln Tyr Val Trp Glu Ser Gln Ala Gly Gly Ser  
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 Phe Thr Val Thr Arg Asp Thr Ser Gly Glu Gln Leu Gly Arg Gly Thr  
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 Lys Ile Thr Leu Phe Leu Lys Asp Asp Gln Leu Glu Tyr Leu Glu Glu  
 65                                70                                75                                80  
 Arg Arg Leu Lys Asp Leu Val Lys Lys His Ser Glu Phe Ile Ser Tyr  
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<210> 2571

<211> 335

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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35 40 45  
Gly Thr Thr Ala Ile Asp Gln Val Glu Lys Gln Arg Glu Asp Gly Ser  
50 55 60  
Ser Tyr Phe Glu Thr Thr Ile Thr Phe Glu Asp Gly Ser Thr Val Thr  
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<210> 2573  
<211> 460  
<212> DNA  
<213> Homo sapiens

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<210> 2574  
<211> 105  
<212> PRT  
<213> Homo sapiens

<400> 2574  
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35 40 45  
Arg Arg Cys Arg His Trp His Asp Glu Gly His His Arg Glu Glu Asn  
50 55 60  
Gly His His Ser Gln Thr Thr Ser Ser Gln Lys Ser Glu Asp Glu Gly  
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<210> 2575  
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<212> DNA  
<213> Homo sapiens

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<210> 2576

<211> 1016

<212> PRT

<213> Homo sapiens

<400> 2576

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Thr	Gly	Ser	Ser	Gly	Ala	Leu	Ser	Pro	Gly	Gly	Pro	Gln	Ala	Gln	Ile
	35						40					45			
Ala	Pro	Arg	Pro	Ala	Ser	Arg	His	Arg	Asn	Trp	Cys	Ala	Tyr	Val	Val
	50					55					60				
Thr	Arg	Thr	Val	Ser	Cys	Val	Leu	Glu	Asp	Gly	Val	Glu	Thr	Tyr	Val
65					70					75				80	
Lys	Tyr	Gln	Pro	Cys	Ala	Trp	Gly	Gln	Pro	Gln	Cys	Pro	Gln	Ser	Ile
				85					90					95	
Met	Tyr	Arg	Arg	Phe	Leu	Arg	Pro	Arg	Tyr	Arg	Val	Ala	Tyr	Lys	Thr
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Val	Thr	Asp	Met	Glu	Trp	Arg	Cys	Cys	Gln	Gly	Tyr	Gly	Gly	Asp	Asp
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Cys	Ala	Glu	Ser	Pro	Ala	Pro	Ala	Leu	Gly	Pro	Ala	Ser	Ser	Thr	Pro
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Arg	Pro	Leu	Ala	Arg	Pro	Ala	Arg	Pro	Asn	Leu	Ser	Gly	Ser	Ser	Ala
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Gly	Ser	Pro	Leu	Ser	Gly	Leu	Gly	Gly	Glu	Gly	Pro	Gly	Glu	Ser	Glu
				165					170					175	
Lys	Val	Gln	Gln	Leu	Glu	Glu	Gln	Val	Gln	Ser	Leu	Thr	Lys	Glu	Leu
			180					185					190		
Gln	Gly	Leu	Arg	Gly	Val	Leu	Gln	Gly	Leu	Ser	Gly	Arg	Leu	Ala	Glu
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Asp	Val	Gln	Arg	Ala	Val	Glu	Thr	Ala	Phe	Asn	Gly	Arg	Gln	Gln	Pro
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Ala	Asp	Ala	Ala	Ala	Arg	Pro	Gly	Val	His	Glu	Thr	Leu	Asn	Glu	Ile
225					230					235					240
Gln	His	Gln	Leu	Gln	Leu	Leu	Asp	Thr	Arg	Val	Ser	Thr	His	Asp	Gln
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Glu	Leu	Gly	His	Leu	Asn	Asn	His	His	Gly	Gly	Ser	Ser	Ser	Ser	Gly
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Gly	Ser	Arg	Ala	Pro	Ala	Pro	Ala	Ser	Ala	Pro	Pro	Gly	Pro	Ser	Glu
	275						280					285			
Glu	Leu	Leu	Arg	Gln	Leu	Glu	Gln	Arg	Leu	Gln	Glu	Ser	Cys	Ser	Val
	290					295					300				
Cys	Leu	Ala	Gly	Leu	Asp	Gly	Phe	Arg	Arg	Gln	Gln	Gln	Glu	Asp	Arg
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Glu	Arg	Leu	Arg	Ala	Met	Glu	Lys	Leu	Leu	Ala	Ser	Val	Glu	Glu	Arg
				325					330					335	
Gln	Arg	His	Leu	Ala	Gly	Leu	Ala	Val	Gly	Arg	Arg	Pro	Pro	Gln	Glu
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Cys	Cys	Ser	Pro	Glu	Leu	Gly	Arg	Arg	Leu	Ala	Glu	Leu	Glu	Arg	Arg

		355						360						365					
Leu	Asp	Val	Val	Ala	Gly	Ser	Val	Thr	Val	Leu	Ser	Gly	Arg	Arg	Gly				
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Thr	Glu	Leu	Gly	Gly	Ala	Ala	Gly	Gln	Gly	Gly	His	Pro	Pro	Gly	Tyr				
385					390					395					400				
Thr	Ser	Leu	Ala	Ser	Arg	Leu	Ser	Arg	Leu	Glu	Asp	Arg	Phe	Asn	Ser				
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Thr	Leu	Gly	Pro	Ser	Glu	Glu	Gln	Glu	Glu	Ser	Trp	Pro	Gly	Ala	Pro				
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His	Gly	Asp	Glu	Gly	Cys	Gly	Ala	Cys	Gly	Gly	Val	Gln	Glu	Glu	Leu				
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Gly	Arg	Leu	Arg	Asp	Gly	Val	Glu	Arg	Cys	Ser	Cys	Pro	Leu	Leu	Pro				
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Gln	Ala	Leu	Gln	Gly	Glu	Leu	Ser	Glu	Val	Ile	Leu	Ser	Phe	Ser	Ser				
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Leu	Asn	Asp	Ser	Leu	Asn	Glu	Leu	Gln	Thr	Thr	Val	Glu	Gly	Gln	Gly				
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Ala	Asp	Leu	Ala	Asp	Leu	Gly	Ala	Thr	Lys	Asp	Arg	Ile	Ile	Ser	Glu				
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Ile	Asn	Arg	Leu	Gln	Gln	Glu	Ala	Thr	Glu	His	Ala	Thr	Glu	Ser	Glu				
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Glu	Arg	Phe	Arg	Gly	Leu	Glu	Glu	Gly	Gln	Ala	Gln	Ala	Gly	Gln	Cys				
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Gly Glu Ala Gly Pro Pro Gly Pro Pro Gly Leu Gln Gly Pro Pro Gly
          820          825          830
Pro Ala Gly Pro Pro Gly Ser Pro Gly Lys Asp Gly Gln Glu Gly Pro
          835          840          845
Ile Gly Pro Pro Gly Pro Gln Gly Glu Gln Gly Val Glu Gly Ala Pro
          850          855          860
Ala Ala Pro Val Pro Gln Val Ala Phe Ser Ala Ala Leu Ser Leu Pro
865          870          875          880
Arg Ser Glu Pro Gly Thr Val Pro Phe Asp Arg Val Leu Leu Asn Asp
          885          890          895
Gly Gly Tyr Tyr Asp Pro Glu Thr Gly Val Phe Thr Ala Pro Leu Ala
          900          905          910
Gly Arg Tyr Leu Leu Ser Ala Val Leu Thr Gly His Arg His Glu Lys
          915          920          925
Val Glu Ala Val Leu Ser Arg Ser Asn Gln Gly Val Ala Arg Val Asp
          930          935          940
Ser Gly Gly Tyr Glu Pro Glu Gly Leu Glu Asn Lys Pro Val Ala Glu
945          950          955          960
Ser Gln Pro Ser Pro Gly Thr Leu Gly Val Phe Ser Leu Ile Leu Pro
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Leu Gln Ala Gly Asp Thr Val Cys Val Asp Leu Val Met Gly Gln Leu
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 <212> DNA  
 <213> Homo sapiens

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<210> 2578  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 2578

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Cys Leu Leu Ser Lys Leu Arg Gly Ser Thr Gly Ala Gly Gln Thr Leu  
35 40 45  
Leu Pro Pro Ala Gly Gln Cys Ser Leu Gly Tyr Arg Ala Leu Ser Pro  
50 55 60  
Thr Val Thr Pro Glu Trp Ile Pro Ala Leu Pro Ala Leu Gly Ser Gln  
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Trp Gly Leu Gly Ala Ser Gln Gly Gln His Glu Pro Leu Ala Arg Val  
85 90 95  
Ser Asn Arg Pro  
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&lt;210&gt; 2579

&lt;211&gt; 420

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2579

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420

&lt;210&gt; 2580

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2580

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Val Phe Ser Tyr Gly Ser Met Phe Tyr Ser Val His Gln Ser Ala Ile  
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Thr Ala Thr Glu Ile Arg Asn Gln Val Lys Lys Glu Met Ile Leu Ala  
35 40 45  
Lys Arg Phe Phe Phe Ile Val Phe Thr Asp Ala Leu Cys Trp Ile Pro  
50 55 60  
Ile Phe Val Val Lys Phe Leu Ser Leu Leu Gln Val Glu Ile Pro Gly  
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<212> DNA
<213> Homo sapiens
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35 40 45  
Pro Gln Arg Ala Lys Val Cys Glu His Phe Leu Ser Pro Leu Asn Gly  
50 55 60  
Leu Ser His Val Ile Leu Thr Arg Leu Leu Cys Phe Ile Thr Ser Val  
65 70 75 80  
Ser Gly Ala Ser His Pro Arg Glu Glu Trp Trp Gly Cys Arg Leu Thr  
85 90 95  
Leu Gly His Leu Ala Ala Ala Ser Val Leu Met Thr Thr Leu Leu Pro  
100 105 110  
Gln Ala Leu Leu Leu Asn Val Leu Ala Leu  
115 120

<210> 2587  
<211> 435  
<212> DNA  
<213> Homo sapiens

<400> 2587  
ncgaatatcc atgcagcgat cccgggcgga atgctctcca acatggagtc ccagcttgag  
60  
gcccagggcg ctggagaccg catggatgag gtcataaagg aggtgccgcg cgttcgtaag  
120  
gatgccggct acccgccgct ggtaaccccg tcgtcccaga tcgtgggaac ccaggcgggtg  
180  
ttcaacgtct tgatgggcaa tggttcgtac aagaatctca ctgccgagtt tgccgacctc  
240  
atgctcggct actacggcaa gccattggc gagctcaatc ctgagatcgt cgagatggcc  
300  
aagaagcaga ccggcaagga gccgatcgac tgccgtcccg ccgacttgct cgagcctgag  
360  
tgggatcagt tggtcgagca ggccaagagt cttgaggggt tcgacggctc cgacgaggac  
420  
gttcttacca acgcg  
435

<210> 2588  
<211> 145  
<212> PRT  
<213> Homo sapiens

<400> 2588  
Xaa Asn Ile His Ala Ala Ile Pro Gly Gly Met Leu Ser Asn Met Glu



1 5 10 15  
Ser Gln Leu Glu Ala Gln Gly Ala Gly Asp Arg Met Asp Glu Val Met  
20 25 30  
Lys Glu Val Pro Arg Val Arg Lys Asp Ala Gly Tyr Pro Pro Leu Val  
35 40 45  
Thr Pro Ser Ser Gln Ile Val Gly Thr Gln Ala Val Phe Asn Val Leu  
50 55 60  
Met Gly Asn Gly Ser Tyr Lys Asn Leu Thr Ala Glu Phe Ala Asp Leu  
65 70 75 80  
Met Leu Gly Tyr Tyr Gly Lys Pro Ile Gly Glu Leu Asn Pro Glu Ile  
85 90 95  
Val Glu Met Ala Lys Lys Gln Thr Gly Lys Glu Pro Ile Asp Cys Arg  
100 105 110  
Pro Ala Asp Leu Leu Glu Pro Glu Trp Asp Gln Leu Val Glu Gln Ala  
115 120 125  
Lys Ser Leu Glu Gly Phe Asp Gly Ser Asp Glu Asp Val Leu Thr Asn  
130 135 140  
Ala  
145

&lt;210&gt; 2589

&lt;211&gt; 366

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2589

ccggcgaaga aggacatggc catggtcttc ggcgcgactc attacgtcga cccgacggcc  
60  
ggcgatccgg ttgagcagat cagagcgctg accagggggcc gcggcgctcga tttcgcgate  
120  
gaggtcgtcg gcacgtcga ggtcatggag caggcctact gggcggcgcg acgcggcgcc  
180  
acgatcgtct acgtcggggc gctgggcatc gacgccaagc tggctctgcc ggcgaacgac  
240  
ctgcacggcg gcgccaagac gatcatcggc tgcgccaacg gattggggcg agtgcgcacc  
300  
gactatgcca agatgatctc gctggtcgag accggacggc tggacctggg cgggatgatc  
360  
acgcgt  
366

&lt;210&gt; 2590

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2590

Pro Ala Lys Lys Asp Met Ala Met Val Phe Gly Ala Thr His Tyr Val  
1 5 10 15  
Asp Pro Thr Ala Gly Asp Pro Val Glu Gln Ile Arg Ala Leu Thr Arg  
20 25 30  
Gly Arg Gly Val Asp Phe Ala Ile Glu Val Val Gly Ile Val Glu Val  
35 40 45  
Met Glu Gln Ala Tyr Trp Ala Ala Arg Arg Gly Gly Thr Ile Val Tyr

50 55 60  
Val Gly Ala Leu Gly Ile Asp Ala Lys Leu Val Leu Pro Ala Asn Asp  
65 70 75 80  
Leu His Gly Gly Ala Lys Thr Ile Ile Gly Cys Ala Asn Gly Leu Gly  
85 90 95  
Ala Val Arg Thr Asp Tyr Ala Lys Met Ile Ser Leu Val Glu Thr Gly  
100 105 110  
Arg Leu Asp Leu Gly Gly Met Ile Thr Arg  
115 120

<210> 2591  
<211> 341  
<212> DNA  
<213> Homo sapiens

<400> 2591  
acgcgtaaag gcatgacctc accttatcat cagggtcaca cgtgtgttat tctggggctg  
60  
agcagcccaac gagttgtcca gcaccaggcc aggggtcagt cagcaatgag gacagctcct  
120  
tcctgctcca gggcaggccc tgggcagggc aatgctgggg acacgggtggg gagtaggcca  
180  
cagcttctgt gggggagttc ctatggcagg aggatcatgc ccagcagcgt ggaagagcaa  
240  
gggggtgacc tgcactcgag gctcctggga agacggggag ggttgaggtt acatgaggga  
300  
gaggggtcag ttggtgcatt cacagaacag caggggtggcc a  
341

<210> 2592  
<211> 109  
<212> PRT  
<213> Homo sapiens

<400> 2592  
Met Thr Ser Pro Tyr His Gln Gly His Thr Cys Val Ile Leu Gly Leu  
1 5 10 15  
Ser Ser Pro Arg Val Val Gln His Gln Ala Arg Gly Gln Ser Ala Met  
20 25 30  
Arg Thr Ala Pro Ser Cys Ser Arg Ala Gly Pro Gly Gln Gly Asn Ala  
35 40 45  
Gly Asp Thr Val Gly Ser Arg Pro Gln Leu Leu Trp Gly Ser Ser Tyr  
50 55 60  
Gly Arg Arg Ile Met Pro Ser Ser Val Glu Glu Gln Gly Val Thr Leu  
65 70 75 80  
His Ser Arg Leu Leu Gly Arg Arg Gly Gly Leu Arg Leu His Glu Gly  
85 90 95  
Glu Gly Ser Val Gly Ala Phe Thr Glu Gln Gln Gly Gly  
100 105

<210> 2593  
<211> 501  
<212> DNA  
<213> Homo sapiens

&lt;400&gt; 2593

cgcgtaaggc caccagaaga tttttatgca cagattccgt tgcttcgaga gctaatttcg  
60  
gcgctttcat ggggttttat ggaggtggat gaatatgagg cggatgatat tatcggtacc  
120  
ttggcgcgcc aagcggatga agcgggggat tatatgactt atattgtgtc ttcggacctc  
180  
gatatgctgc aaatcgtaga tgaaaacacc aagatgtatc gaattctgcg gggatttttcg  
240  
gatctcgagg agatggatac tccagcgatt gaagaaaaat atggaatctt gaagtcgcaa  
300  
tttttggacc tgaaggcgct gaagggggat aattcggata atattccagg cgtaccaggg  
360  
attggtgaga aaaccgcagt gaaactcttg aatgagtatg gtagcttgga ggggatttat  
420  
aatcatatca aggaaatttc gggggcgaca cagaagaaat tgattgctgg acgcgaatca  
480  
gctgagatgt ctcttaagct t  
501

&lt;210&gt; 2594

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2594

Arg	Val	Arg	Pro	Pro	Glu	Asp	Phe	Tyr	Ala	Gln	Ile	Pro	Leu	Leu	Arg
1				5					10					15	
Glu	Leu	Ile	Ser	Ala	Leu	Ser	Trp	Gly	Phe	Met	Glu	Val	Asp	Glu	Tyr
			20					25					30		
Glu	Ala	Asp	Asp	Ile	Ile	Gly	Thr	Leu	Ala	Arg	Gln	Ala	Asp	Glu	Ala
		35				40					45				
Gly	Asp	Tyr	Met	Thr	Tyr	Ile	Val	Ser	Ser	Asp	Leu	Asp	Met	Leu	Gln
	50					55					60				
Ile	Val	Asp	Glu	Asn	Thr	Lys	Met	Tyr	Arg	Ile	Leu	Arg	Gly	Phe	Ser
65					70					75				80	
Asp	Leu	Glu	Glu	Met	Asp	Thr	Pro	Ala	Ile	Glu	Glu	Lys	Tyr	Gly	Ile
				85					90					95	
Leu	Lys	Ser	Gln	Phe	Leu	Asp	Leu	Lys	Ala	Leu	Lys	Gly	Asp	Asn	Ser
			100						105					110	
Asp	Asn	Ile	Pro	Gly	Val	Pro	Gly	Ile	Gly	Glu	Lys	Thr	Ala	Val	Lys
		115						120						125	
Leu	Leu	Asn	Glu	Tyr	Gly	Ser	Leu	Glu	Gly	Ile	Tyr	Asn	His	Ile	Lys
		130					135						140		
Glu	Ile	Ser	Gly	Ala	Thr	Gln	Lys	Lys	Leu	Ile	Ala	Gly	Arg	Glu	Ser
145					150					155					160
Ala	Glu	Met	Ser	Leu	Lys	Leu									

&lt;210&gt; 2595

&lt;211&gt; 928

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 2595  
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 cccccccag ggatacctgt aatacctgct tcccacttca tgggctacaa tctcatgctg  
 120  
 gtcacaattt ctggggctca ctcatataac accaacaat gggatatttg tgaagaactt  
 180  
 cgcctgcggg agcttgaaga agtcaaggcc agagctgctc agatggaaaa gaccatgcgg  
 240  
 tgggtggtcgg actgcactgc caactggaga gaaaaatgga gtaaagtctg agctgaaagg  
 300  
 aacagtgccg gaaaggaagg aagacaactc agaataaaac tagagatggc gatgaaagaa  
 360  
 tcggatccac tgaacagaa acagagtctg ccacttcaga aggaggcatt agaagctaatt  
 420  
 gttaccacagg atctgaagct tcctggcttc gtagaagaat cctgtgaaca tacagaccaa  
 480  
 tttcaattga gttcacaat gcatgagtct atcagagagt atttggtaaa aagacaattt  
 540  
 tctacaaagg aggacacaaa taataaggaa caaggtgtgg ttattgattc tctaaaatta  
 600  
 agtgaggaga tgaagcccaa tctagatggt gttgatttat tcaacaatgg tggttctgga  
 660  
 aacgggtgaaa cgaaaactgg gctgagactg aaagcaataa atctgccttt ggaaaatgaa  
 720  
 gtaactgaaa tttcagcttt gcaggtgcat ttggatgaat tccaaaaaat cttatggaag  
 780  
 gaaagagaaa tgcgcacagc tttggaaaaa gaaatagaga gactggagtc ggctttgtct  
 840  
 ctgtggaagt ggaagtatga agaactgaaa gaatcaaagc caaaaaatgt gaaagagttt  
 900  
 gacattcttc ttggtcaaca taatgatg  
 928

<210> 2596

<211> 309

<212> PRT

<213> Homo sapiens

<400> 2596

Arg	Ser	Ser	Arg	Cys	Asn	Asn	Asp	Gln	Leu	Arg	His	Ala	Ala	Thr	Trp
1				5				10						15	
Trp	Pro	Leu	Pro	His	Pro	Pro	Gly	Ile	Pro	Val	Ile	Pro	Ala	Ser	His
			20				25						30		
Phe	Met	Gly	Tyr	Asn	Leu	Met	Leu	Val	Thr	Ile	Ser	Gly	Ala	His	Ser
		35				40						45			
Tyr	Asn	Thr	Asn	Lys	Trp	Asp	Ile	Cys	Glu	Glu	Leu	Arg	Leu	Arg	Glu
	50				55						60				
Leu	Glu	Glu	Val	Lys	Ala	Arg	Ala	Ala	Gln	Met	Glu	Lys	Thr	Met	Arg
65				70					75					80	
Trp	Trp	Ser	Asp	Cys	Thr	Ala	Asn	Trp	Arg	Glu	Lys	Trp	Ser	Lys	Val
			85					90						95	
Arg	Ala	Glu	Arg	Asn	Ser	Ala	Gly	Lys	Glu	Gly	Arg	Gln	Leu	Arg	Ile

100	105	110
Lys Leu Glu Met Ala Met Lys Glu Ser Asp Pro Leu Lys Gln Lys Gln		
115	120	125
Ser Leu Pro Leu Gln Lys Glu Ala Leu Glu Ala Asn Val Thr Gln Asp		
130	135	140
Leu Lys Leu Pro Gly Phe Val Glu Glu Ser Cys Glu His Thr Asp Gln		
145	150	155
Phe Gln Leu Ser Ser Gln Met His Glu Ser Ile Arg Glu Tyr Leu Val		
165	170	175
Lys Arg Gln Phe Ser Thr Lys Glu Asp Thr Asn Asn Lys Glu Gln Gly		
180	185	190
Val Val Ile Asp Ser Leu Lys Leu Ser Glu Glu Met Lys Pro Asn Leu		
195	200	205
Asp Gly Val Asp Leu Phe Asn Asn Gly Gly Ser Gly Asn Gly Glu Thr		
210	215	220
Lys Thr Gly Leu Arg Leu Lys Ala Ile Asn Leu Pro Leu Glu Asn Glu		
225	230	235
Val Thr Glu Ile Ser Ala Leu Gln Val His Leu Asp Glu Phe Gln Lys		
245	250	255
Ile Leu Trp Lys Glu Arg Glu Met Arg Thr Ala Leu Glu Lys Glu Ile		
260	265	270
Glu Arg Leu Glu Ser Ala Leu Ser Leu Trp Lys Trp Lys Tyr Glu Glu		
275	280	285
Leu Lys Glu Ser Lys Pro Lys Asn Val Lys Glu Phe Asp Ile Leu Leu		
290	295	300
Gly Gln His Asn Asp		
305		

&lt;210&gt; 2597

&lt;211&gt; 631

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2597

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ccatgggtgg gaatgcaaga gacacactct agacttacta gaggagcaag agcaggactt
60
ggctgcacct gcagctgagg gtttagcagga attaggagat aacagtagaa tagggctaga
120
ctgaaaaggc ctttgatgcc aggttaggaa atttacattt tatccacaaa atccaaatcc
180
tcctttaata atgagatgtc tttaacaagt tttgggcaag agtggtatgg ctgacctggg
240
gtcctgggaa ggaactgtgt ggggatgggt tgcaggactt acctaggggt ggaaaggcac
300
aagcagcatg gggctgtggc agctaccaga ggtaaaggga catttcaggg aaagacttgg
360
caggacaaga ccttccttgg atggatggat gaataccaga aacagggacc caagagaaag
420
gccgagtttc atagggagag aagatgggtc atgtatgagg catgttgagc ttgtactgat
480
ggtgagacgt ccagtcgaca gtactacca ctggccagtg agaaatgtgg gaccagggtt
540
caggaggaaa ctggggccgg aaatgagcat ttggaaggcg ccagggtgga agcgggtggg
600

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tcactccacg agtgctattt cacttacgcg t  
631

<210> 2598  
<211> 108  
<212> PRT  
<213> Homo sapiens

<400> 2598  
Met Gly Leu Trp Gln Leu Pro Glu Val Lys Gly His Phe Arg Glu Arg  
1 5 10 15  
Leu Gly Arg Thr Arg Pro Ser Leu Asp Gly Trp Met Asn Thr Arg Asn  
20 25 30  
Arg Asp Pro Arg Glu Arg Pro Ser Phe Ile Gly Arg Glu Asp Gly Ser  
35 40 45  
Cys Met Arg His Val Glu Leu Val Leu Met Val Arg Arg Pro Val Asp  
50 55 60  
Ser Thr Thr His Trp Pro Val Arg Asn Val Gly Pro Gly Phe Arg Arg  
65 70 75 80  
Lys Leu Gly Pro Glu Met Ser Ile Trp Lys Ala Pro Gly Trp Lys Arg  
85 90 95  
Val Val His Ser Thr Ser Ala Ile Ser Leu Thr Arg  
100 105

<210> 2599  
<211> 356  
<212> DNA  
<213> Homo sapiens

<400> 2599  
nagatcttat acagggacgt gatgttgagg aactactgga accttgtttc tctgggactg  
60  
tgtcattttg atatgaatat tatctccatg ttggaggaag ggaaagagcc ctggactgtg  
120  
aagagctgtg tgaaaatagc aagaaaacca agaacgcggg aatgtgtcaa aggcgtggtc  
180  
acagatatcc ctccataatg tacaatcaag gatttgctac caaaagagaa gagcagtaca  
240  
gaagcagtat tccacacagt ggtgttggaag agacacgaaa gccctgacat tgaagacttt  
300  
tccttcaagg aaccccagaa aaatgtgcat gattttgagt gtcaatggag agatgn  
356

<210> 2600  
<211> 118  
<212> PRT  
<213> Homo sapiens

<400> 2600  
Xaa Ile Leu Tyr Arg Asp Val Met Leu Glu Asn Tyr Trp Asn Leu Val  
1 5 10 15  
Ser Leu Gly Leu Cys His Phe Asp Met Asn Ile Ile Ser Met Leu Glu  
20 25 30  
Glu Gly Lys Glu Pro Trp Thr Val Lys Ser Cys Val Lys Ile Ala Arg

```

      35      40      45
Lys Pro Arg Thr Arg Glu Cys Val Lys Gly Val Val Thr Asp Ile Pro
      50      55      60
Pro Lys Cys Thr Ile Lys Asp Leu Leu Pro Lys Glu Lys Ser Ser Thr
65      70      75      80
Glu Ala Val Phe His Thr Val Val Leu Glu Arg His Glu Ser Pro Asp
      85      90      95
Ile Glu Asp Phe Ser Phe Lys Glu Pro Gln Lys Asn Val His Asp Phe
      100      105      110
Glu Cys Gln Trp Arg Asp
      115

```

<210> 2601  
 <211> 329  
 <212> DNA  
 <213> Homo sapiens

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<400> 2601
gcgccgatca tgatctacgg cgacgacgtc acccacctgc tcaccgaaga aggcacgccc
60
tacttggtaca aggcgcgttc cctggaagag cgccaagcga tgatcgccgg cgggtggtggg
120
gtcaccgcct tcggcttgcg ccacaacccc aaggacactg cgcgcatgcg ccgcgaaggc
180
ttgatgcct tgcccgaaga cctcggtatc cgccgcaccg acgccaccg cgaactgttg
240
gccgccaaga gcgtggccga cctgggtggag tgggtccggtg gcttggtgcaa cccgcccggc
300
aagttcagga gctggtaaata gcgcgccct
329

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<210> 2602  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

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<400> 2602
Ala Pro Ile Met Ile Tyr Gly Asp Asp Val Thr His Leu Leu Thr Glu
1      5      10      15
Glu Gly Ile Ala Tyr Leu Tyr Lys Ala Arg Ser Leu Glu Glu Arg Gln
      20      25      30
Ala Met Ile Ala Gly Gly Gly Gly Val Thr Ala Phe Gly Leu Arg His
      35      40      45
Asn Pro Lys Asp Thr Ala Arg Met Arg Arg Glu Gly Leu Ile Ala Leu
      50      55      60
Pro Glu Asp Leu Gly Ile Arg Arg Thr Asp Ala Thr Arg Glu Leu Leu
65      70      75      80
Ala Ala Lys Ser Val Ala Asp Leu Val Glu Trp Ser Gly Gly Leu Cys
      85      90      95
Asn Pro Pro Ala Lys Phe Arg Ser Trp
      100      105

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<210> 2603  
 <211> 423

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2603

tcatgatcca ttgctctacc ctttacgggt gtgcacctac gccaggtcg gtggtcagga  
60  
gcatcggttc ggtggtagcg aggtcgagga cttccttcac gccgttggtc gcggagggca  
120  
ggttgtggta agtggtcagg tgggccacga tctgggcact gatcacctcg gtgaaatcga  
180  
agctctgggt accctgagcg gtcgccgaca cgacacggtc cacaccggag accagaccga  
240  
tctcggagat gatcgcgtaa ccttcattgt cgtagaggat cttgcacgca tcgatgatgc  
300  
gcttgatctc cttggcagtg aagatgattt ccatcggggt gttggccgac agatactgac  
360  
cggagctggg ggtcacctgg gtggaatcca ggatcatccg aaccgggttc aggttgtccg  
420  
cgg  
423

&lt;210&gt; 2604

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2604

Met	Glu	Ile	Ile	Phe	Thr	Ala	Lys	Glu	Ile	Lys	Arg	Ile	Ile	Asp	Ala
1				5				10						15	
Cys	Lys	Ile	Leu	Tyr	Asp	Asn	Glu	Gly	Tyr	Ala	Ile	Ile	Ser	Glu	Ile
			20					25					30		
Gly	Leu	Val	Ser	Gly	Val	Asp	Arg	Val	Val	Ser	Ala	Thr	Ala	Gln	Gly
			35				40				45				
Asn	Gln	Ser	Phe	Asp	Phe	Thr	Glu	Val	Ile	Ser	Ala	Gln	Ile	Val	Ala
			50				55				60				
His	Leu	Thr	Thr	Tyr	His	Asn	Leu	Pro	Ser	Ala	Asn	Asn	Gly	Val	Lys
65				70					75				80		
Glu	Val	Leu	Asp	Leu	Gly	Thr	Thr	Glu	Pro	Met	Leu	Leu	Thr	Thr	Asp
			85					90					95		
Leu	Gly	Val	Gly	Ala	Gln	Pro									
			100												

&lt;210&gt; 2605

&lt;211&gt; 354

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2605

ngggagggag ggcattgcaa aagcgactgt atccagaggg tttgatttaa acatttttca  
60  
aaacatatgt ggcaaacagc ggggggaggg gatctcacca acgtttttct ccacttcttc  
120  
tttgcattgt gggacctgtt ccactttcaa aatgtgtcat tttggaagga aaggaggaa  
180



caactacttg aaaggaatac acgtcagtat gagccctttc tcctcagcag aaggttgccc  
240  
caaagtacct cctctgaggc gagagaaagg agagaggagg agagacagct ttcataaat  
300  
ggggcaccca ggactctagg gagagaggca cgttctcaca aaggcccttt gaggc  
354

<210> 2606  
<211> 101  
<212> PRT  
<213> Homo sapiens

<400> 2606  
Met Ser Lys Ala Thr Val Ser Arg Gly Phe Asp Leu Asn Ile Phe Gln  
1 5 10 15  
Asn Ile Cys Gly Lys Gln Arg Gly Glu Gly Ile Ser Pro Thr Phe Phe  
20 25 30  
Ser Thr Ser Ser Leu His Ala Gly Thr Cys Ser Thr Phe Lys Met Cys  
35 40 45  
His Phe Gly Arg Lys Gly Arg Asn Asn Tyr Leu Lys Gly Ile His Val  
50 55 60  
Ser Met Ser Pro Phe Ser Ser Ala Glu Gly Cys Pro Lys Val Pro Pro  
65 70 75 80  
Leu Arg Arg Glu Lys Gly Glu Arg Arg Arg Asp Ser Phe His Gln Met  
85 90 95  
Gly His Pro Gly Leu  
100

<210> 2607  
<211> 297  
<212> DNA  
<213> Homo sapiens

<400> 2607  
tgatcaagaa caatgatacg atatcctaac caacagagga agcaacggaa gttgttggtg  
60  
tttttatgct gttttttttt ttgagaacg gatcttgccc ctgccccag gccggaatgg  
120  
atgacatgga cagaaccccg tcggaaaaaa gccggaatgt gcaaacccaa attcccacca  
180  
cacggggggc ctaacaattg gatccatccc cnaaaaaanc cntnncaaaa aaagntaaaa  
240  
actttttttt ttttaannn anacccccaa aaaaaccaa aaaaaaatt taaaaaa  
297

<210> 2608  
<211> 95  
<212> PRT  
<213> Homo sapiens

<400> 2608  
Met Ile Arg Tyr Pro Asn Gln Gln Arg Lys Gln Arg Lys Leu Leu Leu  
1 5 10 15  
Phe Leu Cys Cys Phe Phe Phe Leu Arg Thr Asp Leu Ala Pro Ala Pro

	20		25		30										
Arg	Pro	Glu	Trp	Met	Thr	Trp	Thr	Glu	Pro	Arg	Arg	Lys	Lys	Ala	Gly
	35		40		45										
Met	Cys	Lys	Pro	Lys	Phe	Pro	Pro	His	Gly	Gly	Pro	Asn	Asn	Trp	Ile
	50		55		60										
His	Pro	Xaa	Lys	Xaa	Pro	Xaa	Gln	Lys	Lys	Xaa	Lys	Thr	Phe	Phe	Phe
65			70		75				80						
Leu	Xaa	Xaa	Xaa	Pro	Gln	Lys	Asn	Gln	Lys	Lys	Lys	Phe	Lys	Lys	
			85		90				95						

&lt;210&gt; 2609

&lt;211&gt; 305

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2609

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ncgccatcgg catgatgtca ggcaaagatg atcctggcat ggcaaaggta tacggttttg
60
ttgacacgtc cctgacgatc cctatccgct catctggaga cccatgcgtt ccttggaccc
120
caattgecta cgaaaaaatt ttttttttcc cccccaaaaa acaccccccc ctcgcatctg
180
tgaaagttct acctcggggt cgtcatctcg gctgtcatcg tcggcaaadc actcagctgg
240
ccgtaccctt cgtcatcgcc cggggccaccg acctcgacgg cncagcgtgc acggcaacga
300
ccacc
305

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&lt;210&gt; 2610

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2610

Met	Met	Ser	Gly	Lys	Asp	Asp	Pro	Gly	Met	Ala	Lys	Val	Tyr	Gly	Phe
1			5				10				15				
Val	Asp	Thr	Ser	Leu	Thr	Ile	Pro	Ile	Arg	Ser	Ser	Gly	Asp	Pro	Cys
	20		25		30										
Val	Pro	Trp	Thr	Pro	Ile	Ala	Tyr	Glu	Lys	Ile	Phe	Phe	Phe	Pro	Pro
	35		40		45										
Lys	Lys	His	Pro	Pro	Leu	Ala	Ser	Val	Lys	Val	Leu	Pro	Arg	Gly	Arg
	50		55		60										
His	Leu	Gly	Cys	His	Arg	Arg	Gln	Ile	Thr	Gln	Leu	Ala	Val	Pro	Phe
65			70		75				80						
Val	Ile	Ala	Arg	Ala	Thr	Asp	Leu	Asp	Gly	Xaa	Ala	Cys	Thr	Ala	Thr
			85		90				95						

Thr Thr

&lt;210&gt; 2611

&lt;211&gt; 342

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 2611  
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60  
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120  
acgcccagcg ccaccgctgt cggagctcag gtgcgccgcy tcgaggtggc aacagccaac  
180  
ggcaccagca caattcgctt cgaccagccc ggcaagccgc tgacggcggc gctgccctac  
240  
ggcgagacct catgggtccg gttcaccgcy accggcaccg acgacggctc ccccgggctg  
300  
cagttcggca tcaccgactt ctccgtgacg cagtacgacg cg  
342

<210> 2612  
<211> 114  
<212> PRT  
<213> Homo sapiens

<400> 2612  
Ala Ala Ala Ile Asp Gly Asp Ser Ser Thr Ser Trp Val Ser Ser Ser  
1 5 10 15  
Leu Gln Thr Ala Val Gly Gln Trp Leu Gln Val Asp Phe Asp His Pro  
20 25 30  
Val Thr Asn Ala Thr Ile Thr Leu Thr Pro Ser Ala Thr Ala Val Gly  
35 40 45  
Ala Gln Val Arg Arg Val Glu Val Ala Thr Ala Asn Gly Thr Ser Thr  
50 55 60  
Ile Arg Phe Asp Gln Pro Gly Lys Pro Leu Thr Ala Ala Leu Pro Tyr  
65 70 75 80  
Gly Glu Thr Ser Trp Val Arg Phe Thr Ala Thr Gly Thr Asp Asp Gly  
85 90 95  
Ser Pro Gly Val Gln Phe Gly Ile Thr Asp Phe Ser Val Thr Gln Tyr  
100 105 110  
Asp Ala

<210> 2613  
<211> 414  
<212> DNA  
<213> Homo sapiens

<400> 2613  
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60  
ttctcctcct ccaaaagggtg agggctcgac ctaatggtac tttgtctgat gttttccaga  
120  
tatgccccta ctgggaaggg ccaagtgggc aggcagagtc tgggggtggag cgaggtgggg  
180  
ctgggaagca ctctgctttt tctgctgccc cagaacgaat gcaagtctctg gcagcttctc  
240  
ctcctcctgg gaggaggaaa ggagggtctg cctccaggtc tcaggctgag ggagtgggct  
300

ggagaccctc tagatggcca gcagaggctg gcctctgtga gaaggcttcc ttgcgtgact  
360  
ctggggccccc tcccaggctc tctcgtggc aggcagggac ttgggccagc atgg  
414

<210> 2614  
<211> 107  
<212> PRT  
<213> Homo sapiens

<400> 2614  
Met Val Leu Cys Leu Met Phe Ser Arg Tyr Ala Pro Thr Gly Lys Gly  
1 5 10 15  
Gln Val Gly Arg Gln Ser Leu Gly Trp Ser Glu Val Gly Leu Gly Ser  
20 25 30  
Thr Pro Ala Phe Leu Leu Pro Gln Asn Glu Cys Lys Phe Trp Gln Leu  
35 40 45  
Leu Leu Leu Leu Gly Gly Gly Lys Glu Gly Ser Pro Pro Gly Leu Arg  
50 55 60  
Leu Arg Glu Trp Ala Gly Asp Pro Leu Asp Gly Gln Gln Arg Leu Ala  
65 70 75 80  
Ser Val Arg Arg Leu Pro Cys Val Thr Leu Gly Pro Leu Pro Gly Ser  
85 90 95  
Pro Arg Gly Arg Gln Gly Leu Gly Pro Ala Trp  
100 105

<210> 2615  
<211> 394  
<212> DNA  
<213> Homo sapiens

<400> 2615  
nnngccgccg cctcggccg cagcgcgctt cttttgcgcn ncgacgtcag ccagaaggcg  
60  
gacgtcgacg ccattgctgaa ggaaacgctg gccagttcg gccacatcga taccctcgtc  
120  
aacaatgcgg gcgtcacgca tgcggccgat ttcctcgacg tgtgcgaaga cgatttcgac  
180  
cgggtcatgc gcattaacct gaaatcgatg ttcctgtgcg gccaggccgc ggcgcgcgag  
240  
atggtcaagc gcaacagcgg ctgcatcatc aacatgtcca gcgtgaatgc ggaactggcc  
300  
attccgaacc aggtgccgta cgtggtgtcg aaaggcgcca tcaaccagct gaccaaggtc  
360  
atggccttga acctggcgcc gcacgggtgcg cgct  
394

<210> 2616  
<211> 131  
<212> PRT  
<213> Homo sapiens

<400> 2616  
Xaa Ala Ala Ala Leu Gly Arg Ser Ala Leu Leu Leu Arg Xaa Asp Val

1	5	10	15
Ser Gln Lys	Ala Asp Val Asp Ala Met Leu Lys Glu Thr Leu Ala Gln		
	20	25	30
Phe Gly His	Ile Asp Ile Leu Val Asn Asn Ala Gly Val Thr His Ala		
	35	40	45
Ala Asp Phe	Leu Asp Val Cys Glu Asp Asp Phe Asp Arg Val Met Arg		
	50	55	60
Ile Asn Leu	Lys Ser Met Phe Leu Cys Gly Gln Ala Ala Arg Glu		
65	70	75	80
Met Val Lys	Arg Asn Ser Gly Cys Ile Ile Asn Met Ser Ser Val Asn		
	85	90	95
Ala Glu Leu	Ala Ile Pro Asn Gln Val Pro Tyr Val Val Ser Lys Gly		
	100	105	110
Ala Ile Asn	Gln Leu Thr Lys Val Met Ala Leu Asn Leu Ala Pro His		
	115	120	125
Gly Ala Arg			
130			

<210> 2617  
 <211> 513  
 <212> DNA  
 <213> Homo sapiens

<400> 2617  
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 agacattgtg agatgggaaa tatcatggaa acacctatac tttccggctc ccacttgaac  
 120  
 gtcaccttgg gaaatcacia gattctcaat gacgtctccg tatcattcca agcgggagtt  
 180  
 atgcacgcca tacttggtcc caacggttct gggaagacca ccctggtacg cacgttatgc  
 240  
 ggagccctct ccccccagtc ggggagcgtc aaattcgatg gaacggatct atccacgatg  
 300  
 tccgcatact gtatcgcgcg tcgtattgag atcgtctggc agagcgcgac cgctccctct  
 360  
 gacctcaccg tacgtcacct cggtggctac gggagatatg cccacacacc gtggtggcag  
 420  
 ataagggaca ccagcgccga cagccatgtg gaacaagcaa tggagctggc cgatgtcacg  
 480  
 tgcttcgccc atcgacgcgt caccactctc tca  
 513

<210> 2618  
 <211> 171  
 <212> PRT  
 <213> Homo sapiens

Xaa Arg Leu Ala Ser Cys Ser Gln His Trp Gly Phe Pro Ser Phe Phe			
1	5	10	15
Ser Ser Ser Glu Arg His Cys Glu Met Gly Asn Ile Met Glu Thr Pro			
	20	25	30
Ile Leu Ser Gly Ser His Leu Asn Val Thr Leu Gly Asn His Lys Ile			

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      35      40      45
Leu Asn Asp Val Ser Val Ser Phe Gln Ala Gly Val Met His Ala Ile
  50      55      60
Leu Gly Pro Asn Gly Ser Gly Lys Thr Thr Leu Val Arg Thr Leu Cys
65      70      75      80
Gly Ala Leu Ser Pro Glu Ser Gly Ser Val Lys Phe Asp Gly Thr Asp
      85      90      95
Leu Ser Thr Met Ser Ala Ser Cys Ile Ala Arg Arg Ile Ala Ile Val
      100      105      110
Trp Gln Ser Ala Thr Ala Pro Ser Asp Leu Thr Val Arg His Leu Val
      115      120      125
Gly Tyr Gly Arg Tyr Ala His Thr Pro Trp Trp Gln Ile Arg Asp Thr
      130      135      140
Ser Ala Asp Ser His Val Glu Gln Ala Met Glu Leu Ala Asp Val Thr
145      150      155      160
Cys Phe Ala Asp Arg Arg Val Thr Thr Leu Ser
      165      170

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<210> 2619  
 <211> 348  
 <212> DNA  
 <213> Homo sapiens

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<400> 2619
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cggatgaacc cgtacaactc ggtgtggagc ggtgtgaccg acggtgacgg gccgcaggaa
120
cagcacgtca ttttccttga taacggctcg accgacgtgc ttgccgacac ccttggtcgc
180
gaagtgttgc ggtgcatccg gtgtgcttcg tgtatcaata tctgcccggg ttacgagcgg
240
gcggggcggc acccttacgg ctcggtgtac cccggggccga ttggtgcggt gctcaatccg
300
cagctgcggg gcgtggagca tcccgtcgat cgtggtctgc catacgcg
348

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<210> 2620  
 <211> 116  
 <212> PRT  
 <213> Homo sapiens

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<400> 2620
Xaa Asn Phe Asp Asp Leu Glu Val Phe Leu Lys Leu Leu Pro Arg Ser
  1      5      10      15
Ala Xaa Gly Glu Arg Met Asn Pro Tyr Asn Ser Val Trp Ser Gly Val
      20      25      30
Thr Asp Gly Asp Gly Pro Gln Glu Gln His Val Ile Phe Leu Asp Asn
      35      40      45
Gly Arg Thr Asp Val Leu Ala Asp Thr Leu Gly Arg Glu Val Leu Arg
      50      55      60
Cys Ile Arg Cys Ala Ser Cys Ile Asn Ile Cys Pro Val Tyr Glu Arg
65      70      75      80
Ala Gly Gly His Pro Tyr Gly Ser Val Tyr Pro Gly Pro Ile Gly Ala

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85 90 95  
Val Leu Asn Pro Gln Leu Arg Gly Val Glu His Pro Val Asp Arg Gly  
100 105 110  
Leu Pro Tyr Ala  
115

<210> 2621  
<211> 1485  
<212> DNA  
<213> Homo sapiens

<400> 2621  
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60  
ttacttttaa aaattacttg ttcccccaaa ttgttgagtg ccgccgtttg gtttcctatg  
120  
ttttctttcc ctgttttgat ttgtctgaag ggagaggtgg tggtaggttag gatcagagct  
180  
ctcctggcat ccgtggggag gatttgctgg tggtaggttc gggctcatgc ccagacacac  
240  
tcactgcccc gtctgtccaa ggccctccct tcccctttgc tggtagggagg agctcgtgtg  
300  
ctccttggcc gcttactgga agggcgtttt tcagagctgc agggacaggg tgagcagctg  
360  
aagggttagg aggggaagccg gccccgctc tgcagaagct gcatttcagc tgaatctgtg  
420  
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480  
acattagaga ataaacagcc acacacacat ttttttttcc tttaaaacag taacttggaa  
540  
atatgaaaag gccagaagga ggagcaaggg ctgttttctg gagtgggtga ggtgttgctc  
600  
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660  
cctcctccct ccactccttg ggagcccagg tggctccttg ccaccattca ggctttccaa  
720  
gaagccaacc accttgagga ttttttttct tgaatttcgc tgttttcttc tgcttctctt  
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agataaaaag cagctcaaga gaccttatct tagggatgag aaaaacatgc atattaattc  
840  
catctgagtg attgtcagtg taaggccttt taaaacaaaa gcaagttctt tgttaggaat  
900  
tgggtcaaat tcatctcttt cttaagccc atcaactccc aggacggttt gagttactca  
960  
gttacctaag cttgctattc atccaaatca ttttctagag tcactgtata agggctctatg  
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1080  
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1140  
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1260

taacttgnta gctatctttg aaatcactgn actttgcaat ggtgctaagc tgatagattt  
1320  
aaatacacag acgggcgagt ggcgcccgtg tcgatgtctt cagccagtgg tgaccctgct  
1380  
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1440  
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1485

&lt;210&gt; 2622

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2622

Met	Phe	Ser	Phe	Pro	Val	Leu	Ile	Leu	Leu	Lys	Gly	Glu	Val	Val	Val
1				5				10					15		
Val	Arg	Ile	Arg	Ala	Leu	Leu	Ala	Ser	Val	Gly	Arg	Ile	Cys	Trp	Trp
			20				25					30			
Trp	Leu	Arg	Ala	His	Ala	Gln	Thr	His	Ser	Leu	Pro	Arg	Leu	Ser	Lys
		35				40				45					
Ala	Ser	Pro	Ser	Pro	Leu	Leu	Val	Gly	Gly	Ala	Arg	Val	Leu	Leu	Gly
	50				55			60							
Arg	Leu	Leu	Glu	Gly	Arg	Phe	Ser	Glu	Leu	Gln	Gly	Gln	Gly	Glu	Gln
65				70				75					80		
Leu	Lys	Gly													

&lt;210&gt; 2623

&lt;211&gt; 3524

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2623

nggatccgaa ttcgcgcccg cgtcgactgg agaggacggc gttattttta ttaactggag  
60  
gcgacggcgg ctgcggcgcc ggcggggacc ccaggcctcc tccgggggtat gaaaatcggc  
120  
agtgggttcc tgagtggcgg cggaggtacc ggcagtagcg gtggtagcgg ctccggcgcc  
180  
ggtggtagtg gcggcgccgg cggcgccggc agcagcggca ggagggcaga gatggaaccc  
240  
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300  
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360  
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420  
gcggcgtcag ccgcgccctt cccctcgag aggacctct gggggttctt gcagtctttg  
480  
gttagcatca aacaggagaa acccgcgat cctgaggagc agcagtccca ccaccaccat  
540  
caccaccacc actatggggg gctgttcgct ggagctgaag agaggtctcc aggcctagga  
600



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660  
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720  
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780  
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840  
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900  
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960  
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1020  
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1080  
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1140  
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1200  
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1260  
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1320  
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1380  
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1620  
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1680  
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1920  
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1980  
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2040  
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2100  
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2160  
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2220

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2580  
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2700  
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2760  
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2820  
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2940  
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3060  
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3120  
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3180  
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3240  
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3300  
ctgggctgat agacatttcg tcatttaagt aagggatcga agacatttca aattgctatc  
3360  
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3420  
taaagtact ctgaacttcc aaaccacatt cattccagcc tggtagaaca aatattcttg  
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3524

&lt;210&gt; 2624

&lt;211&gt; 895

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2624

Met	Lys	Ile	Gly	Ser	Gly	Phe	Leu	Ser	Gly	Gly	Gly	Gly	Thr	Gly	Ser
1			5					10					15		
Ser	Gly	Gly	Ser	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Gly

20				25				30							
Gly	Gly	Ser	Ser	Gly	Arg	Arg	Ala	Glu	Met	Glu	Pro	Thr	Phe	Pro	Gln
35				40				45							
Gly	Met	Val	Met	Phe	Asn	His	Arg	Leu	Pro	Pro	Val	Thr	Ser	Phe	Thr
50				55				60							
Arg	Pro	Ala	Gly	Ser	Ala	Ala	Pro	Pro	Pro	Gln	Cys	Val	Leu	Ser	Ser
65	70				75				80						
Ser	Thr	Ser	Ala	Ala	Pro	Ala	Ala	Glu	Pro	Pro	Pro	Pro	Pro	Ala	Pro
85				90				95							
Asp	Met	Thr	Phe	Lys	Lys	Glu	Pro	Ala	Ala	Ser	Ala	Ala	Ala	Phe	Pro
100				105				110							
Ser	Gln	Arg	Thr	Ser	Trp	Gly	Phe	Leu	Gln	Ser	Leu	Val	Ser	Ile	Lys
115				120				125							
Gln	Glu	Lys	Pro	Ala	Asp	Pro	Glu	Glu	Gln	Gln	Ser	His	His	His	His
130				135				140							
His	His	His	His	Tyr	Gly	Gly	Leu	Phe	Ala	Gly	Ala	Glu	Glu	Arg	Ser
145	150				155				160						
Pro	Gly	Leu	Gly	Gly	Gly	Glu	Gly	Gly	Ser	His	Gly	Val	Ile	Gln	Asp
165				170				175							
Leu	Ser	Ile	Leu	His	Gln	His	Val	Gln	Gln	Gln	Pro	Ala	Gln	His	His
180				185				190							
Arg	Asp	Val	Leu	Leu	Ser	Ser	Ser	Ser	Arg	Thr	Asp	Asp	His	His	Gly
195				200				205							
Thr	Glu	Glu	Pro	Lys	Gln	Asp	Thr	Asn	Val	Lys	Lys	Ala	Lys	Arg	Pro
210				215				220							
Lys	Pro	Glu	Ser	Gln	Gly	Ile	Lys	Ala	Lys	Arg	Lys	Pro	Ser	Ala	Ser
225	230				235				240						
Ser	Lys	Pro	Ser	Leu	Val	Gly	Asp	Gly	Glu	Gly	Ala	Ile	Leu	Ser	Pro
245				250				255							
Ser	Gln	Lys	Pro	His	Ile	Cys	Asp	His	Cys	Ser	Ala	Ala	Phe	Arg	Ser
260				265				270							
Ser	Tyr	His	Leu	Arg	Arg	His	Val	Leu	Ile	His	Thr	Gly	Glu	Arg	Pro
275				280				285							
Phe	Gln	Cys	Ser	Gln	Cys	Ser	Met	Gly	Phe	Ile	Gln	Lys	Tyr	Leu	Leu
290				295				300							
Gln	Arg	His	Glu	Lys	Ile	His	Ser	Arg	Glu	Lys	Pro	Phe	Gly	Cys	Asp
305	310				315				320						
Gln	Cys	Ser	Met	Lys	Phe	Ile	Gln	Lys	Tyr	His	Met	Glu	Arg	His	Lys
325				330				335							
Arg	Thr	His	Ser	Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Asp	Thr	Cys	Gln	Gln
340				345				350							
Tyr	Phe	Ser	Arg	Thr	Asp	Arg	Leu	Leu	Lys	His	Arg	Arg	Thr	Cys	Gly
355				360				365							
Glu	Val	Ile	Val	Lys	Gly	Ala	Thr	Ser	Ala	Glu	Pro	Gly	Ser	Ser	Asn
370				375				380							
His	Thr	Asn	Met	Gly	Asn	Leu	Ala	Val	Leu	Ser	Gln	Gly	Asn	Thr	Ser
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Ser	Ser	Arg	Arg	Lys	Thr	Lys	Ser	Lys	Ser	Ile	Ala	Ile	Glu	Asn	Lys
405				410				415							
Glu	Gln	Lys	Thr	Gly	Lys	Thr	Asn	Glu	Ser	Gln	Ile	Ser	Asn	Asn	Ile
420				425				430							
Asn	Met	Gln	Ser	Tyr	Ser	Val	Glu	Met	Pro	Thr	Val	Ser	Ser	Ser	Gly
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Gly	Ile	Ile	Gly	Thr	Gly	Ile	Asp	Glu	Leu	Gln	Lys	Arg	Val	Pro	Lys

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Leu Ile Phe Lys Lys Gly Ser Arg Lys Asn Thr Asp Lys Asn Tyr Leu				
470		475		480
Asn Phe Val Ser Pro Leu Pro Asp Ile Val Gly Gln Lys Ser Leu Ser				
	485		490	495
Gly Lys Pro Ser Gly Ser Leu Gly Ile Val Ser Asn Asn Ser Val Glu				
	500		505	510
Thr Ile Gly Leu Leu Gln Ser Thr Ser Gly Lys Gln Gly Gln Ile Ser				
	515		520	525
Ser Asn Tyr Asp Asp Ala Met Gln Phe Ser Lys Lys Arg Arg Tyr Leu				
	530		535	540
Pro Thr Ala Ser Ser Asn Ser Ala Phe Ser Ile Asn Val Gly His Met				
545		550		555
Val Ser Gln Gln Ser Val Ile Gln Ser Ala Gly Val Ser Val Leu Asp				
	565		570	575
Asn Glu Ala Pro Leu Ser Leu Ile Asp Ser Ser Ala Leu Asn Ala Glu				
	580		585	590
Ile Lys Ser Cys His Asp Lys Ser Gly Ile Pro Asp Glu Val Leu Gln				
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Ser Ile Leu Asp Gln Tyr Ser Asn Lys Ser Glu Ser Gln Lys Glu Asp				
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Pro Phe Asn Ile Ala Glu Pro Arg Val Asp Leu His Thr Ser Gly Glu				
625		630		635
His Ser Glu Leu Val Gln Glu Glu Asn Leu Ser Pro Gly Thr Gln Thr				
	645		650	655
Pro Ser Asn Asp Lys Ala Ser Met Leu Gln Glu Tyr Ser Lys Tyr Leu				
	660		665	670
Gln Gln Ala Phe Glu Lys Ser Thr Asn Ala Ser Phe Thr Leu Gly His				
	675		680	685
Gly Phe Gln Phe Val Ser Leu Ser Ser Pro Leu His Asn His Thr Leu				
	690		695	700
Phe Pro Glu Lys Gln Ile Tyr Thr Thr Ser Pro Leu Glu Cys Gly Phe				
705		710		715
Gly Gln Ser Val Thr Ser Val Leu Pro Ser Ser Leu Pro Lys Pro Pro				
	725		730	735
Phe Gly Met Leu Phe Gly Ser Gln Pro Gly Leu Tyr Leu Ser Ala Leu				
	740		745	750
Asp Ala Thr His Gln Gln Leu Thr Pro Ser Gln Glu Leu Asp Asp Leu				
	755		760	765
Ile Asp Ser Gln Lys Asn Leu Glu Thr Ser Ser Ala Phe Gln Ser Ser				
	770		775	780
Ser Gln Lys Leu Thr Ser Gln Lys Glu Gln Lys Asn Leu Glu Ser Ser				
785		790		795
Thr Gly Phe Gln Ile Pro Ser Gln Glu Leu Ala Ser Gln Ile Asp Pro				
	805		810	815
Gln Lys Asp Ile Glu Pro Arg Thr Thr Tyr Gln Ile Glu Asn Phe Ala				
	820		825	830
Gln Ala Phe Gly Ser Gln Phe Lys Ser Gly Ser Arg Val Pro Met Thr				
	835		840	845
Phe Ile Thr Asn Ser Asn Gly Glu Val Asp His Arg Val Arg Thr Ser				
	850		855	860
Val Ser Asp Phe Ser Gly Tyr Thr Asn Met Met Ser Asp Val Ser Glu				
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Pro Cys Ser Thr Arg Val Lys Thr Pro Thr Ser Gln Ser Tyr Arg				880

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<212> DNA  
<213> Homo sapiens

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<212> PRT  
<213> Homo sapiens

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Arg Ile Val Ala Ala His Asn Lys Cys Pro Arg Asp Gly Arg Phe Val  
35 40 45  
Glu Gln Leu Gly Ser Tyr Asp Pro Leu Pro Asn Ser His Gly Glu Lys  
50 55 60  
Leu Val Ala Leu Asn Leu Asp Arg Ile Arg His Trp Ile Gly Cys Gly  
65 70 75 80  
Ala His Leu Ser Lys Pro Met Glu Lys Leu Leu Gly Leu Ala Gly Phe  
85 90 95  
Phe Pro Leu His Pro Met Met Ile Thr Asn Ala Glu Arg Leu Arg Arg  
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atttagaaac ctgtgagaag caagatataa tgccagaagt ggacaagcag tctgggttcgc  
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<211> 90  
<212> PRT  
<213> Homo sapiens

<400> 2628  
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Ala Pro Phe Ser Ser Thr Ser Phe Ser Val Pro Lys Lys Ala Arg Ala			
35	40	45	
Asp Cys Thr Cys Ile Ser Thr Ala Glu Leu Phe Ile Cys Asp Ser Ala			
50	55	60	
Phe Phe Arg Ser Ser Gly Ser Arg Glu Arg His Ser Phe Lys Val Phe			
65	70	75	80
Phe Leu Cys Ile Pro Pro Pro Leu His Ala			
85	90		

&lt;210&gt; 2629

&lt;211&gt; 650

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2629

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650

&lt;210&gt; 2630

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2630

Met Asp Asn Leu Glu Lys Gln Leu Ile Cys Pro Ile Cys Leu Glu Met			
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Phe Ser Lys Pro Val Val Ile Leu Pro Cys Gln His Asn Leu Cys Arg			
20	25	30	
Lys Cys Ala Asn Asp Val Phe Gln Val Gly Ala Arg Asp Gly Gln Gly			
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50

55

&lt;210&gt; 2631

&lt;211&gt; 5124

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2631

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<210> 2632

<211> 550

<212> PRT

<213> Homo sapiens

<400> 2632

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Ile	Leu	Lys	Phe	Asn	Ser	Lys	Phe	Glu	Ser	Gly	Asn	Leu	Arg	Lys	Val
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Ile	Gln	Ile	Arg	Lys	Asn	Glu	Tyr	Asp	Leu	Ile	Leu	Asn	Ser	Asp	Ile
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Asn	Ser	Gln	Phe	Asn	Tyr	Gly	Met	Gln	Pro	Leu	Met	Tyr	Ser	Val	Gln
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Glu	Ala	Leu	Asn	Ala	Arg	Pro	Trp	Trp	Ile	Arg	Met	Gly	Thr	Asp	Ile
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Cys	Tyr	Tyr	Lys	Asn	His	Phe	Ser	Arg	Ser	Ser	Val	Ala	Ala	Gly	Gly
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Gln	Lys	Gly	Lys	Ser	Tyr	Tyr	Thr	Ile	Thr	Phe	Thr	Val	Asn	Phe	Pro
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Tyr	Glu	His	Ile	Cys	His	Phe	Arg	Asn	Arg	Pro	Tyr	Val	Phe	Leu	Ser

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Glu Ser Tyr Ile Phe Lys Ile Val Pro Met Leu Asn Pro Asp Gly Val  
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Ile Asn Gly Asn His Arg Cys Ser Leu Ser Gly Glu Asp Leu Asn Arg  
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Gln Trp Gln Ser Pro Ser Pro Asp Leu His Pro Thr Ile Tyr His Ala  
305                      310                      315                      320  
Lys Gly Leu Leu Gln Tyr Leu Ala Ala Val Lys Arg Leu Pro Leu Val  
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Tyr Cys Asp Tyr His Gly His Ser Arg Lys Lys Asn Val Phe Met Tyr  
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Ser Cys Asp Val Val Glu Asp Thr Gly Tyr Arg Thr Leu Pro Lys Ile  
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Leu Ser His Ile Ala Pro Ala Phe Cys Met Ser Ser Cys Ser Phe Val  
385                      390                      395                      400  
Val Glu Lys Ser Lys Glu Ser Thr Ala Arg Val Val Val Trp Arg Glu  
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Ile Gly Val Gln Arg Ser Tyr Thr Met Glu Ser Thr Leu Cys Gly Cys  
                         420                      425                      430  
Asp Gln Gly Lys Tyr Lys Gly Leu Gln Ile Gly Thr Arg Glu Leu Glu  
                         435                      440                      445  
Glu Met Gly Ala Lys Phe Cys Val Gly Leu Leu Arg Leu Lys Arg Leu  
                         450                      455                      460  
Thr Ser Pro Leu Glu Tyr Asn Leu Pro Ser Ser Leu Leu Asp Phe Glu  
465                      470                      475                      480  
Asn Asp Leu Ile Glu Ser Ser Cys Lys Val Thr Ser Pro Thr Thr Tyr  
                         485                      490                      495  
Val Leu Asp Glu Asp Glu Pro Arg Phe Leu Glu Glu Val Asp Tyr Ser  
                         500                      505                      510  
Ala Glu Ser Asn Asp Glu Leu Asp Ile Glu Leu Ala Glu Asn Val Gly  
                         515                      520                      525  
Asp Tyr Glu Pro Ser Ala Gln Glu Glu Val Leu Ser Asp Ser Glu Leu  
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Ser Arg Thr Tyr Leu Pro  
545                      550

&lt;210&gt; 2633

&lt;211&gt; 1569

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2633

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1569

&lt;210&gt; 2634

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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 Tyr Val Leu Leu Arg Gln Thr Xaa Asn Gly Val Pro Ala Gly Pro Cys  
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 Ser Phe Ala Glu Glu Leu Ser Arg Ile Leu Glu Lys Arg Lys His Thr  
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 Gln Leu Val Glu Gln Leu Asp Glu Ser Ser Val  
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 <211> 1062  
 <212> DNA  
 <213> Homo sapiens

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 120  
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 240  
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 360  
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 420  
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 480  
 acccccacta tactaaaatc agccgtgtct gaactgaagg aggggctgta gcctcgcctc  
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 aaaccacca gtcccagagt taatagctgc aaccaatcga ttacggcaag cacacatcca  
 600  
 gattgggggtg aaatgtgacc ctttcgccta aatttacgaa taatatcgtc ctctctgac  
 660  
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 720  
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 780  
 ccccttgaca tcagccatt tctatttgtt cttattaggt cctcgggcta cgaggaccta  
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 900  
 ccacccaggg ggccgcatcc cacaccccag gaccctgtt cccagttctc tccactaccc  
 960  
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<210> 2636

<211> 63  
 <212> PRT  
 <213> Homo sapiens

<400> 2636  
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 Thr Pro Gln Asp Pro Cys Ser Gln Phe Ser Pro Leu Pro Arg Arg Pro  
 20 25 30  
 Arg Gly Arg Val Pro Pro Val Val Arg Arg Glu Glu Thr Ser Pro Lys  
 35 40 45  
 Gly Asp Gly Ser Ile Arg Arg Tyr Phe Cys Gly Glu Ala Ala Ala  
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 <213> Homo sapiens

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 240  
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 360  
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<210> 2638

<211> 263

<212> PRT

<213> Homo sapiens

<400> 2638

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Phe His Pro Leu Glu Trp Leu Ala Arg Glu Ala Cys Asn Gln Asp Ala  
35 40 45  
Leu Gln Glu Ala Gly Thr Phe Arg His Thr Leu Trp Lys Arg Val Gln  
50 55 60  
Gly Ala Val Thr Pro Leu Leu Ala Ser Met Ile Ser Phe Ile Asp Arg  
65 70 75 80  
Asp Gly Asn Leu Glu Leu Leu Thr Arg Pro Asp Thr Pro Pro Trp Ala  
85 90 95  
Arg Asp Leu Trp Met Phe Ile Phe Ser Asp Thr Met Leu Leu Asn Ile  
100 105 110  
Pro Leu Val Met Asn Asn Glu Arg His Lys Gly Glu Met Ala Tyr Ile  
115 120 125  
Val Val Gln Asn His Met Asn Leu Ser Glu Asn Ala Ser Asn Asn Val  
130 135 140  
Pro Phe Ser Trp Lys Ile Lys Asp Tyr Leu Glu Glu Leu Trp Val Gln  
145 150 155 160  
Ala Gln Tyr Ile Thr Asp Ala Glu Gly Leu Pro Lys Lys Phe Val Asp  
165 170 175  
Ile Phe Gln Gln Thr Pro Leu Gly Arg Phe Leu Ala Gln Leu His Gly  
180 185 190  
Glu Pro Gln Gln Glu Leu Leu Gln Cys Tyr Leu Lys Asp Phe Ile Leu  
195 200 205  
Leu Thr Met Arg Val Ser Thr Glu Glu Glu Leu Lys Phe Leu Gln Met  
210 215 220  
Ala Leu Trp Ser Cys Thr Arg Lys Leu Lys Ala Ala Ser Glu Ala Pro  
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<210> 2639

<211> 3777

<212> DNA

<213> Homo sapiens

<400> 2639

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120



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3777

&lt;210&gt; 2640

&lt;211&gt; 645

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2640

Leu	Gly	Pro	Trp	Ala	Glu	Asn	Asp	His	Leu	Lys	Lys	Glu	Thr	Ser	Gly
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Val	Val	Leu	Ala	Leu	Ser	Ala	Glu	Gly	Pro	Pro	Thr	Ala	Ala	Ser	Glu
20				25					30						
Gln	Tyr	Thr	Asp	Arg	Leu	Glu	Leu	Gln	Pro	Gly	Ala	Ala	Ser	Gln	Phe
		35				40					45				
Ile	Ala	Ala	Thr	Pro	Thr	Ser	Leu	Met	Glu	Ala	Gln	Ala	Glu	Gly	Pro
	50				55				60						
Leu	Thr	Ala	Ile	Thr	Ile	Pro	Arg	Pro	Ser	Val	Ala	Ser	Thr	Gln	Ser
65				70					75					80	
Thr	Ser	Gly	Ser	Phe	His	Cys	Gly	Gln	Gln	Pro	Glu	Lys	Glu	Asp	Leu
			85				90						95		
Gln	Pro	Met	Glu	Pro	Thr	Val	Glu	Leu	Tyr	Ser	Pro	Arg	Glu	Asn	Phe
		100					105						110		
Ser	Gly	Leu	Val	Val	Thr	Glu	Gly	Glu	Pro	Pro	Ser	Gly	Gly	Ser	Arg
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Thr	Asp	Leu	Gly	Leu	Gln	Ile	Asp	His	Ile	Gly	His	Asp	Met	Leu	Pro
	130				135				140						
Asn	Ile	Arg	Glu	Ser	Asn	Lys	Ser	Gln	Asp	Leu	Gly	Pro	Lys	Glu	Leu
145				150					155					160	
Pro	Asp	His	Asn	Arg	Leu	Val	Val	Arg	Glu	Phe	Glu	Asn	Leu	Pro	Gly
			165				170						175		
Glu	Thr	Glu	Glu	Lys	Ser	Ile	Leu	Leu	Glu	Ser	Asp	Asn	Glu	Asp	Glu
	180					185						190			
Lys	Leu	Ser	Arg	Gly	Gln	His	Cys	Ile	Glu	Ile	Ser	Ser	Leu	Pro	Gly
	195				200							205			
Asp	Leu	Val	Ile	Val	Glu	Lys	Asp	His	Ser	Ala	Thr	Thr	Glu	Pro	Leu
	210				215						220				
Asp	Val	Thr	Lys	Thr	Gln	Thr	Phe	Ser	Val	Val	Pro	Asn	Gln	Asp	Lys
225				230					235					240	
Asn	Asn	Glu	Ile	Met	Lys	Leu	Leu	Thr	Val	Gly	Thr	Ser	Glu	Ile	Ser
			245				250						255		
Ser	Arg	Asp	Ile	Asp	Pro	His	Val	Glu	Gly	Gln	Ile	Gly	Gln	Val	Ala

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Glu Met Gln Lys Asn Lys Ile Ser Lys Asp Asp Asp Ile Met Ser Glu					
275		280		285	
Asp Leu Pro Gly His Gln Gly Asp Leu Ser Thr Phe Leu His Gln Glu					
290		295		300	
Gly Lys Arg Glu Lys Ile Thr Pro Arg Asn Gly Glu Leu Phe His Cys					
305		310		315	320
Val Ser Glu Asn Glu His Gly Ala Pro Thr Arg Lys Asp Met Val Arg					
	325		330		335
Ser Ser Phe Val Thr Arg His Ser Arg Ile Pro Val Leu Ala Gln Glu					
	340		345		350
Ile Asp Ser Thr Leu Glu Ser Ser Ser Pro Val Ser Ala Lys Glu Lys					
	355		360		365
Leu Leu Gln Lys Lys Ala Tyr Gln Pro Asp Leu Val Lys Leu Leu Val					
	370		375		380
Glu Lys Arg Gln Phe Lys Ser Phe Leu Gly Asp Leu Ser Ser Ala Ser					
385		390		395	400
Asp Lys Leu Leu Glu Glu Lys Leu Ala Thr Val Pro Ala Pro Phe Cys					
	405		410		415
Glu Glu Glu Val Leu Thr Pro Phe Ser Arg Leu Thr Val Asp Ser His					
	420		425		430
Leu Ser Arg Ser Ala Glu Asp Ser Phe Leu Ser Pro Ile Ile Ser Gln					
	435		440		445
Ser Arg Lys Ser Lys Ile Pro Arg Pro Val Ser Trp Val Asn Thr Asp					
	450		455		460
Gln Val Asn Ser Ser Thr Ser Ser Gln Phe Phe Pro Arg Pro Pro Pro					
465		470		475	480
Gly Lys Pro Pro Thr Arg Pro Gly Val Glu Ala Arg Leu Arg Arg Tyr					
	485		490		495
Lys Val Leu Gly Ser Ser Asn Ser Asp Ser Asp Leu Phe Ser Arg Leu					
	500		505		510
Ala Gln Ile Leu Gln Asn Gly Ser Gln Lys Pro Arg Ser Thr Thr Gln					
	515		520		525
Cys Lys Ser Pro Gly Ser Pro His Asn Pro Lys Thr Pro Pro Lys Ser					
	530		535		540
Pro Val Val Pro Arg Arg Ser Pro Ser Ala Ser Pro Arg Ser Ser Ser					
545		550		555	560
Leu Pro Arg Thr Ser Ser Ser Ser Pro Ser Arg Ala Gly Arg Pro His					
	565		570		575
His Asp Gln Arg Ser Ser Ser Pro His Leu Gly Arg Ser Lys Ser Pro					
	580		585		590
Pro Ser His Ser Gly Ser Ser Ser Ser Arg Arg Ser Cys Gln Gln Glu					
	595		600		605
His Cys Lys Pro Ser Lys Asn Gly Leu Lys Gly Ser Gly Ser Leu His					
	610		615		620
His His Ser Ala Ser Thr Lys Thr Pro Gln Gly Lys Ser Lys Pro Ala					
625		630		635	640
Ser Lys Leu Ser Arg					
	645				

&lt;210&gt; 2641

&lt;211&gt; 744

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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120  
gaaacctagg tgtaggaat gcaaccagct agatctgacc catgccctgt tttgtgtctg  
180  
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<211> 176  
<212> PRT  
<213> Homo sapiens

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Ser Asp Ile Glu Ile Pro Ser Val Val Ser Val Gln Ser Val Gln Lys  
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85 90 95  
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Pro Gly Ile Gln Asp Ser Gly Gln Asp Thr Pro Arg Gly Thr Pro Glu  
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Ser Gly Thr Ser Gly Gln Ser Ser Asp Thr Glu Ser Gly Tyr Leu Gln

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<210> 2644

<211> 871

<212> PRT

<213> Homo sapiens

<400> 2644

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Tyr	Ser	Asp	His	Ser	Gln	Gln	Asp	Ser	Val	Gln	Glu	Gly	Glu	Lys	Pro
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Glu	Cys	Glu	Gln	Gly	Phe	Asp	Arg	Asn	Ala	Ser	Leu	Ser	Val	Tyr	Pro
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Lys	Thr	His	Thr	Gly	Tyr	Lys	Phe	Tyr	Val	Cys	Asn	Glu	Tyr	Gly	Thr
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Glu Pro Tyr Lys Cys Asn Glu Arg Gly Lys Ser Phe Arg His Asn Ser		400
	405	410
Thr Leu Lys Ile His Gln Arg Val His Ser Gly Glu Lys Pro Tyr Lys		415
	420	425
Cys Ser Glu Cys Gly Lys Ala Phe His Arg His Thr His Leu Asn Glu		430
	435	440
His Arg Arg Ile His Thr Gly Tyr Arg Pro His Lys Cys Gln Glu Cys		445
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Val Arg Ser Phe Ser Arg Pro Ser His Leu Met Arg His Gln Ala Ile		
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His Thr Ala Glu Lys Pro Tyr Ser Cys Ala Glu Cys Lys Glu Thr Phe		480
	485	490
Ser Asp Asn Asn Arg Leu Val Gln His Gln Lys Met His Thr Val Lys		495
	500	505
Thr Pro Tyr Glu Cys Gln Glu Cys Gly Glu Arg Phe Ile Cys Gly Ser		510
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Thr Leu Lys Cys His Glu Ser Val His Ala Arg Glu Lys Gln Gly Phe		525
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Phe Val Ser Gly Lys Ile Leu Asp Gln Asn Pro Glu Gln Lys Glu Lys		540
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Cys Phe Lys Cys Asn Lys Cys Glu Lys Thr Phe Ser Cys Ser Lys Tyr		560
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Cys Asp Gln Cys Gly Lys Ala Phe Gly Gln Ser Thr Arg Leu Ile His		590
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Gly Lys Ala Ile Ser Ser Ala Ser Leu Ile Lys Leu Gln Ser Phe His		620
625	630	635
Thr Lys Glu His Pro Phe Lys Cys Asn Glu Cys Gly Lys Thr Phe Ser		640
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His Ser Ala His Leu Ser Lys His Gln Leu Ile His Ala Gly Glu Asn		655
	660	665
Pro Phe Lys Cys Ser Lys Cys Asp Arg Val Phe Thr Gln Arg Asn Tyr		670
	675	680
Leu Val Gln His Glu Arg Thr His Ala Arg Lys Lys Pro Leu Val Cys		685
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Gln Arg Ile His Ser Gly Glu Lys Pro Tyr Val Cys Asp Tyr Cys Gly		720
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	740	745
Thr Gly Glu Lys Pro Tyr Val Cys Gln Glu Cys Gly Lys Ala Phe Thr		750
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Gln Ser Ser Cys Leu Ser Ile His Arg Arg Val His Thr Gly Glu Lys		765
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Pro Tyr Arg Cys Gly Glu Cys Gly Lys Ala Phe Ala Gln Lys Ala Asn		

785                      790                      795                      800  
Leu Thr Gln His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Ser Cys  
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Asn Val Cys Gly Lys Ala Phe Val Leu Ser Ala His Leu Asn Gln His  
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Leu Arg Val His Thr Gln Glu Thr Leu Tyr Gln Cys Gln Arg Cys Gln  
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<211> 1018

<212> DNA

<213> Homo sapiens

<400> 2645

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<400> 2646

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Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp  
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Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro  
145 150 155 160  
Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala  
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<400> 2647

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 1368

&lt;210&gt; 2648

&lt;211&gt; 389

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2648

Thr Arg Ser Asp Gly Asp Phe Leu His Ser Thr Asn Gly Asn Lys Glu  
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 Lys Leu Phe Pro His Val Thr Pro Lys Gly Ile Asn Gly Ile Asp Phe  
 20 25 30  
 Lys Gly Glu Ala Ile Thr Phe Lys Ala Thr Thr Ala Gly Ile Leu Ala  
 35 40 45  
 Thr Leu Ser His Cys Ile Glu Leu Met Val Lys Arg Glu Asp Ser Trp  
 50 55 60  
 Gln Lys Arg Leu Asp Lys Glu Thr Glu Lys Lys Arg Arg Thr Glu Glu  
 65 70 75 80  
 Ala Tyr Lys Asn Ala Met Thr Glu Leu Lys Lys Lys Ser His Phe Gly  
 85 90 95  
 Gly Pro Asp Tyr Glu Glu Gly Pro Asn Ser Leu Ile Asn Glu Glu Glu  
 100 105 110  
 Phe Phe Asp Ala Val Glu Ala Ala Leu Asp Arg Gln Asp Lys Ile Glu  
 115 120 125  
 Glu Gln Ser Gln Ser Glu Lys Val Arg Leu His Trp Pro Thr Ser Leu

130 135 140  
 Pro Ser Gly Asp Ala Phe Ser Ser Val Gly Thr His Arg Phe Val Gln  
 145 150 155 160  
 Lys Val Glu Glu Met Val Gln Asn His Met Thr Tyr Ser Leu Gln Asp  
 165 170 175  
 Val Gly Gly Asp Ala Asn Trp Gln Leu Val Val Glu Glu Gly Glu Met  
 180 185 190  
 Lys Val Tyr Arg Arg Glu Val Glu Glu Asn Gly Ile Val Leu Asp Pro  
 195 200 205  
 Leu Lys Ala Thr His Ala Val Lys Gly Val Thr Gly His Glu Val Cys  
 210 215 220  
 Asn Tyr Phe Trp Asn Val Asp Val Arg Asn Asp Trp Glu Thr Thr Ile  
 225 230 235 240  
 Glu Asn Phe His Val Val Glu Thr Leu Ala Asp Asn Ala Ile Ile Ile  
 245 250 255  
 Tyr Gln Thr His Lys Arg Val Trp Pro Ala Ser Gln Arg Asp Val Leu  
 260 265 270  
 Tyr Leu Ser Val Ile Arg Lys Ile Pro Ala Leu Thr Glu Asn Asp Pro  
 275 280 285  
 Glu Thr Trp Ile Val Cys Asn Phe Ser Val Asp His Asp Ser Ala Pro  
 290 295 300  
 Leu Asn Asn Arg Cys Val Arg Ala Lys Ile Asn Val Ala Met Ile Cys  
 305 310 315 320  
 Gln Thr Leu Val Ser Pro Pro Glu Gly Asn Gln Glu Ile Ser Arg Asp  
 325 330 335  
 Asn Ile Leu Cys Lys Ile Thr Tyr Val Ala Asn Val Asn Pro Gly Gly  
 340 345 350  
 Trp Ala Pro Ala Ser Val Leu Arg Ala Val Ala Lys Arg Glu Tyr Pro  
 355 360 365  
 Lys Phe Leu Lys Arg Phe Thr Ser Tyr Val Gln Glu Lys Thr Ala Gly  
 370 375 380  
 Lys Pro Ile Leu Phe  
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<210> 2649  
 <211> 1299  
 <212> DNA  
 <213> Homo sapiens

<400> 2649  
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 120  
 gatgcctggg gcccatggag tgaatgctca cgcacctgcg ggggtggggc ctctactct  
 180  
 ctgaggcgct gcctgagcag caagagctgt gaaggaagaa atatccgata cagaacatgc  
 240  
 agtaatgtgg actgcccacc agaagcaggt gatttccgag ctcagcaatg ctcagctcat  
 300  
 aatgatgtca agcaccatgg ccagttttat gaatggcttc ctgtgtctaa tgaccctgac  
 360  
 aacctatgtt cactcaagtg ccaagccaaa ggaacaaccc tgggtgttga actagcacct  
 420

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600  
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660  
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720  
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780  
cagaaaattc cagacaaaga gatactgaga atggctggac cactcacagc agatttcatt  
840  
gtcaagattc gtaactcggg ctccgctgac agtacagtcc agttcatctt ctatcaaccc  
900  
atcatccacc gatggaggga gacggatttc tttccttget cagcaacctg tggaggaggt  
960  
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1020  
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1080  
gaccttgtc cagccagtga cggatacaag cagatcatgc cttatgacct ctaccatccc  
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1200  
cagagcccgg gcagtttctt gtgtggagga ggacatccag gggcatgtca cttcagtgga  
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1299

&lt;210&gt; 2650

&lt;211&gt; 428

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2650

Xaa	Asp	Pro	Ser	Met	Glu	Cys	Cys	Arg	Arg	Ala	Thr	Pro	Gly	Thr	Leu
1				5				10					15		
Leu	Leu	Phe	Leu	Ala	Phe	Leu	Leu	Leu	Ser	Ser	Arg	Thr	Ala	Arg	Ser
			20					25					30		
Glu	Glu	Asp	Arg	Asp	Gly	Leu	Trp	Asp	Ala	Trp	Gly	Pro	Trp	Ser	Glu
		35					40					45			
Cys	Ser	Arg	Thr	Cys	Gly	Gly	Gly	Ala	Ser	Tyr	Ser	Leu	Arg	Arg	Cys
	50					55				60					
Leu	Ser	Ser	Lys	Ser	Cys	Glu	Gly	Arg	Asn	Ile	Arg	Tyr	Arg	Thr	Cys
65					70				75					80	
Ser	Asn	Val	Asp	Cys	Pro	Pro	Glu	Ala	Gly	Asp	Phe	Arg	Ala	Gln	Gln
			85						90					95	
Cys	Ser	Ala	His	Asn	Asp	Val	Lys	His	His	Gly	Gln	Phe	Tyr	Glu	Trp
		100						105					110		
Leu	Pro	Val	Ser	Asn	Asp	Pro	Asp	Asn	Pro	Cys	Ser	Leu	Lys	Cys	Gln
		115					120					125			
Ala	Lys	Gly	Thr	Thr	Leu	Val	Val	Glu	Leu	Ala	Pro	Lys	Val	Leu	Asp

130	135	140
Gly Thr Arg Cys Tyr Thr Glu Ser Leu Asp Met Cys Ile Ser Gly Leu		
145	150	155
Cys Gln Ile Val Gly Cys Asp His Gln Leu Gly Ser Thr Val Lys Glu		160
	165	170
Asp Asn Cys Gly Val Cys Asn Gly Asp Gly Ser Thr Cys Arg Leu Val		175
	180	185
Arg Gly Gln Tyr Lys Ser Gln Leu Ser Ala Thr Lys Ser Asp Asp Thr		190
	195	200
Val Val Ala Ile Pro Tyr Gly Ser Arg His Ile Arg Leu Val Leu Lys		205
	210	215
Gly Pro Asp His Leu Tyr Leu Glu Thr Lys Thr Leu Gln Gly Thr Lys		220
225	230	235
Gly Glu Asn Ser Leu Ser Ser Thr Gly Thr Phe Leu Val Asp Asn Ser		240
	245	250
Ser Val Asp Phe Gln Lys Phe Pro Asp Lys Glu Ile Leu Arg Met Ala		255
	260	265
Gly Pro Leu Thr Ala Asp Phe Ile Val Lys Ile Arg Asn Ser Gly Ser		270
	275	280
Ala Asp Ser Thr Val Gln Phe Ile Phe Tyr Gln Pro Ile Ile His Arg		285
	290	295
Trp Arg Glu Thr Asp Phe Phe Pro Cys Ser Ala Thr Cys Gly Gly Gly		300
305	310	315
Tyr Gln Leu Thr Ser Ala Glu Cys Tyr Asp Leu Arg Ser Asn Arg Val		320
	325	330
Val Ala Asp Gln Tyr Cys His Tyr Tyr Pro Glu Asn Ile Lys Pro Lys		335
	340	345
Pro Lys Leu Gln Glu Cys Asn Leu Asp Pro Cys Pro Ala Ser Asp Gly		350
	355	360
Tyr Lys Gln Ile Met Pro Tyr Asp Leu Tyr His Pro Leu Pro Arg Trp		365
	370	375
Glu Ala Thr Pro Trp Thr Ala Cys Ser Ser Ser Cys Gly Gly Gly Ile		380
385	390	395
Gln Ser Pro Gly Ser Phe Leu Cys Gly Gly Gly His Pro Gly Ala Cys		400
	405	410
His Phe Ser Gly Arg Val Glu Met His Val His Pro		415
	420	425

&lt;210&gt; 2651

&lt;211&gt; 628

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2651

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120

gagacaggcc gagtgaccaa gacaaaggac gggcatgagg ttcggacctg caaagtggcg

180

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240

ggggacatta tccggtcac caaagggtac gcttcagttt tcaaagggtg tctgacacta

300



tatactggcc gtgggggtga tctgcagaag attggagaat tctgcatgga ttattctgag  
360  
gttcctaact tcagttagcc aaaccagag tacagcacc agcaggcacc caacaaggcg  
420  
gtgcagaacg acagcaaccc ttcagcttcc cagcctacca ctggaccctc tgctgcctct  
480  
ccagcctctg agaaccagaa tgggaatgga atgagtgtccc caccagggtt cggggtggtg  
540  
gcccacatcc ccctcatact ccctcccacc caccagcac ccgaatcact cgaagccagc  
600  
ccaaccacac acctgcaggc ccgcctgg  
628

&lt;210&gt; 2652

&lt;211&gt; 209

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2652

Tyr	Thr	Val	Leu	Pro	Ala	Gly	Leu	Val	Gly	Cys	Arg	Gly	Ser	Gly	Ser
1				5					10					15	
Met	Thr	Thr	Glu	Thr	Phe	Val	Lys	Gly	Ile	Lys	Pro	Gly	Leu	Lys	Asn
			20					25					30		
Leu	Asn	Leu	Ile	Phe	Ile	Val	Leu	Glu	Thr	Gly	Arg	Val	Thr	Lys	Thr
		35					40					45			
Lys	Asp	Gly	His	Glu	Val	Arg	Thr	Cys	Lys	Val	Ala	Asp	Lys	Thr	Gly
	50					55					60				
Ser	Ile	Asn	Ile	Ser	Val	Trp	Asp	Asp	Val	Gly	Asn	Leu	Ile	Gln	Pro
65					70					75				80	
Gly	Asp	Ile	Ile	Arg	Leu	Thr	Lys	Gly	Tyr	Ala	Ser	Val	Phe	Lys	Gly
				85					90					95	
Cys	Leu	Thr	Leu	Tyr	Thr	Gly	Arg	Gly	Gly	Asp	Leu	Gln	Lys	Ile	Gly
			100					105					110		
Glu	Phe	Cys	Met	Asp	Tyr	Ser	Glu	Val	Pro	Asn	Phe	Ser	Glu	Pro	Asn
		115					120					125			
Pro	Glu	Tyr	Ser	Thr	Gln	Gln	Ala	Pro	Asn	Lys	Ala	Val	Gln	Asn	Asp
					135							140			
Ser	Asn	Pro	Ser	Ala	Ser	Gln	Pro	Thr	Thr	Gly	Pro	Ser	Ala	Ala	Ser
145					150					155				160	
Pro	Ala	Ser	Glu	Asn	Gln	Asn	Gly	Asn	Gly	Met	Ser	Ala	Pro	Pro	Gly
				165					170					175	
Phe	Arg	Val	Val	Ala	His	Ile	Pro	Leu	Ile	Leu	Pro	Pro	Thr	His	Pro
			180					185					190		
Ala	Pro	Glu	Ser	Leu	Glu	Ala	Ser	Pro	Thr	Thr	His	Leu	Gln	Ala	Arg
			195				200					205			

Leu

&lt;210&gt; 2653

&lt;211&gt; 2103

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2653

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120  
caagctactg accgtactcg ggcgtattag gagccgcgtt ccagcctcac accccacggt  
180  
gctgttttcg acttcagaaa ggatctagcc tcagcacaga agcgcctcag gcgcggcgca  
240  
aagctcgagc ggacggcggg ggcggccgga gcctctctcg ggggagccgc gcctgaggag  
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360  
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540  
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720  
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780  
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1140  
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2103

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<212> PRT  
<213> Homo sapiens

<400> 2654  
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Ser Asp Ser Lys Cys Leu Leu Leu Gly Ala Val Ala His Ala Cys  
35 40 45  
Asn Pro Ser Thr Leu Gly Gly Arg Gly Gly Arg Ile Thr Arg Ser Gly  
50 55 60  
Asp Arg Asp Tyr Pro Gly  
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<210> 2655  
<211> 1752  
<212> DNA  
<213> Homo sapiens

<400> 2655  
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300  
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360

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420  
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600  
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660  
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1740  
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1752

&lt;210&gt; 2656

&lt;211&gt; 493

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2656

Met Glu Thr Met Trp Glu Ile Pro Ala Ile Gly His Phe Leu Cys Leu  
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 Ala Gln Gln Ile Leu Asn Leu Pro Glu Ile Val Phe Tyr Glu Leu Glu  
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 Arg Cys Leu Leu Met Pro Gln Cys Asn Ala Phe Leu Ser Lys Ile Met  
 35 40 45  
 Thr Ser Leu Leu Ser Pro Pro His Arg Arg Pro Thr Leu His Arg Arg  
 50 55 60  
 Pro Thr Leu Pro Tyr Arg Thr Trp Glu Ala Ala Leu Arg Gln Lys Val  
 65 70 75 80  
 Gln Gln Trp Tyr Thr Ala Val Gly Gln Thr Glu Asn Pro Asp Asn Cys  
 85 90 95  
 Ala Glu Lys Leu Gly Leu Cys Pro Gln Phe Phe Lys Val Leu Gly Glu  
 100 105 110  
 Val Asn Pro Leu Glu Glu Lys Pro Phe His Glu Leu Pro Phe Tyr Gln  
 115 120 125  
 Lys Val Trp Leu Leu Lys Gly Leu Cys Asp Phe Val Tyr Asp Thr His  
 130 135 140  
 Lys Glu Val Gln Asp Ala Val Leu Gly Gln Pro Ile His Glu Cys Arg  
 145 150 155 160  
 Ala Val Ile Leu Arg Tyr Asp Tyr Leu Glu Thr Ala Tyr Val His Phe  
 165 170 175  
 Pro Gln Phe Cys Gly Ala Asp Val Arg Ile Tyr Lys Gln Arg Pro Phe  
 180 185 190  
 Gln Ala Pro Glu Phe Pro Ile Pro Pro Ile Lys Ile Gln Arg Val Pro  
 195 200 205  
 Arg Ile Lys Leu Glu Lys Leu Lys Cys Asp Tyr Val Ser Thr Ser Asn  
 210 215 220  
 Gly Glu His Arg Cys Ser Arg Asp Ser Leu Pro Ser Ser Phe Lys Lys  
 225 230 235 240  
 Glu Gln Glu Asn Asn Phe Asp Pro Ala Cys Cys Pro Ala Lys Met Ile  
 245 250 255  
 Leu Asp Asn His Asp Ile Ser Val Glu Met Gly Val Lys Ser Asn Tyr  
 260 265 270  
 Glu Ile Arg Ile Arg Arg Pro Cys Glu Ile Lys Lys Thr Asp Cys Cys  
 275 280 285  
 Lys Glu Asn Leu Glu Lys Pro Arg Ser Pro Gly Glu Val Thr Gly Phe  
 290 295 300  
 Gly Glu Pro Leu Ser Pro Gly Glu Ile Arg Phe Ile Glu Asn Gln Glu  
 305 310 315 320  
 Lys Tyr Gly Glu Ala Ser Arg Ile Lys Ile Glu Pro Ser Pro Leu Lys  
 325 330 335  
 Glu Asn Thr Leu Lys Ser Cys Gln Ile His Val Asn Gly Ser His Ser  
 340 345 350  
 Asp His Pro Glu Ile Asn Cys His Lys Val Val Arg Asp Ile Leu Leu  
 355 360 365  
 Glu Gln Ser Leu Gln Ser His Lys Lys Leu Lys Leu Thr Lys Met Arg  
 370 375 380  
 Ala Lys Lys Lys Lys Lys Lys Lys Lys Leu Lys Asp Val Leu Asn  
 385 390 395 400  
 Glu Asn Leu Gln Arg Lys Arg Glu Gly Leu His Ser Leu Ala Phe Lys  
 405 410 415  
 Ser Tyr Lys Pro Glu Ile Gln Asn Lys Leu Leu Ile Ile Lys Lys Lys

420 425 430  
Ala Lys His Lys Lys His Lys Ser Gly Lys Lys Ser Val Ser Lys Lys  
435 440 445  
Ala Ile Thr Lys Lys Arg Lys Thr Val Ile Lys Ser Pro Thr Val Pro  
450 455 460  
Glu Phe Gln Leu Ile Cys Thr Asn Leu Asp Glu Leu Arg Glu Leu Ile  
465 470 475 480  
Thr Lys Ile Glu Asn Glu Leu Lys Asp Leu Glu Lys Lys  
485 490

&lt;210&gt; 2657

&lt;211&gt; 972

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2657

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120  
gtcctgttgt ctaagggcca aggggcagta gcccctctc caggggccct gagcacagag  
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gcgtcagatc agagttgcc tcttcaactt gatatgcccc ccacatccca gcagctctgt  
240  
ggggccaggc tactggcatc cacatgactc ccagggcctg agtccacact gcctgaggac  
300  
aggagcctca aaactgaaat gcacgtgctt cggaccagcc atccgtgcct gacaatgtcc  
360  
tatggaaaca cccacacgtg tgcagatcgc tgcaatgaaa ggggccgtca tgggggtggg  
420  
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480  
cacagacatg aagggaattcc ccgtggaatg aggttagaaa aggaagggca agagtggacg  
540  
tataagatgc cccatgctgt gtgaaaactg ccatgagaga gagacggagg aagggggaga  
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660  
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&lt;210&gt; 2658

&lt;211&gt; 76

&lt;212&gt; PRT

<213> Homo sapiens

<400> 2658

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20 25 30  
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35 40 45  
Asp Leu Gly Gly His Gly Gly Ser Met Pro Ser Thr Ala Gly Trp Gly  
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<210> 2659

<211> 691

<212> DNA

<213> Homo sapiens

<400> 2659

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aatggagaga acaccttcaa acgcattgga ccccgctgg agaagcctgt ggagaagggtg  
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<210> 2660

<211> 120

<212> PRT

<213> Homo sapiens

<400> 2660

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Pro	Gln	Met	Pro	Pro	Tyr	Ala	Phe	Ala	His	Pro	Pro	Phe	Pro	Leu	Pro
	50					55					60				
Pro	Val	Arg	Pro	Val	Phe	Asn	Asn	Phe	Pro	Leu	Asn	Met	Gly	Pro	Ile
65					70					75				80	
Pro	Ala	Pro	Tyr	Val	Pro	Pro	Leu	Pro	Asn	Val	Arg	Val	Asn	Tyr	Asp
			85					90					95		
Phe	Gly	Pro	Ile	His	Met	Pro	Leu	Glu	His	Asn	Leu	Pro	Met	His	Phe
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Gly	Pro	Gln	Pro	Arg	His	Arg	Phe								
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&lt;210&gt; 2661

&lt;211&gt; 1395

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2661

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 240  
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 300  
 aatttggatc tcttcaaggg acttgcagat tatgtggctg caactttcga catctggaag  
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 480  
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 540  
 gaacagtctg tggaagttat ggctagtgtc ctgactgggt atcttcacac tatttcttct  
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 720  
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 780  
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 960  
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 1020



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 1395

<210> 2662

<211> 415

<212> PRT

<213> Homo sapiens

<400> 2662

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			20					25					30		
Lys	Leu	Glu	Met	Lys	Ala	Leu	Arg	Glu	Leu	Asp	Arg	Phe	Ser	Val	Leu
			35				40					45			
Asn	Ser	Gln	His	Met	Phe	Glu	Val	Leu	Ala	Ala	Met	Asn	His	Arg	Ser
			50			55					60				
Leu	Ile	Leu	Leu	Asp	Glu	Cys	Ser	Lys	Val	Val	Leu	Asp	Asn	Ile	His
65				70					75					80	
Gly	Cys	Pro	Leu	Arg	Ile	Met	Ile	Asn	Ile	Leu	Gln	Ser	Cys	Lys	Asp
				85					90					95	
Leu	Gln	Tyr	His	Asn	Leu	Asp	Leu	Phe	Lys	Gly	Leu	Ala	Asp	Tyr	Val
			100					105					110		
Ala	Ala	Thr	Phe	Asp	Ile	Trp	Lys	Phe	Arg	Lys	Val	Leu	Phe	Ile	Leu
		115				120						125			
Ile	Leu	Phe	Glu	Asn	Leu	Gly	Phe	Arg	Pro	Val	Gly	Leu	Met	Asp	Leu
		130				135					140				
Phe	Met	Lys	Arg	Ile	Val	Glu	Asp	Pro	Glu	Ser	Leu	Asn	Met	Lys	Asn
145				150					155					160	
Ile	Leu	Ser	Ile	Leu	His	Thr	Tyr	Ser	Ser	Leu	Asn	His	Val	Tyr	Lys
				165				170						175	
Cys	Gln	Asn	Lys	Glu	Gln	Phe	Val	Glu	Val	Met	Ala	Ser	Ala	Leu	Thr
			180					185					190		
Gly	Tyr	Leu	His	Thr	Ile	Ser	Ser	Glu	Asn	Leu	Leu	Asp	Ala	Val	Tyr
		195				200						205			
Ser	Phe	Cys	Leu	Met	Asn	Tyr	Phe	Pro	Leu	Ala	Pro	Phe	Asn	Gln	Leu
		210				215					220				
Leu	Gln	Lys	Asp	Ile	Ile	Ser	Glu	Leu	Leu	Thr	Ser	Asp	Asp	Met	Lys
225				230						235				240	
Asn	Ala	Tyr	Lys	Leu	His	Thr	Leu	Asp	Thr	Cys	Leu	Lys	Leu	Asp	Asp
				245				250						255	
Thr	Val	Tyr	Leu	Arg	Asp	Ile	Ala	Leu	Ser	Leu	Pro	Gln	Leu	Pro	Arg



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1024

<210> 2664  
<211> 199  
<212> PRT  
<213> Homo sapiens

<400> 2664  
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Ala Arg Trp Glu His Lys Thr Arg Lys Leu Ser Arg Ala Phe Gly Ser  
35 40 45  
Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Val Thr Ile Leu Leu Leu Asn  
50 55 60  
Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg  
65 70 75 80  
Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu  
85 90 95  
Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly  
100 105 110  
Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe Gly Ile Leu Lys Glu Ala  
115 120 125  
Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp  
130 135 140  
Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro  
145 150 155 160  
Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala  
165 170 175  
Leu Leu Tyr Glu Glu Pro Phe Thr Ala Glu Ile Tyr Arg Gln Lys Ala  
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Ser Gly Ser His Lys Arg Ser  
195

<210> 2665  
<211> 720  
<212> DNA  
<213> Homo sapiens

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120  
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180

atgcctgcac tgtaagggag ctgcttttcc cgggtgctgg cgagaacgga agccttcctt  
240  
tgacgttttt ctaaactgg gatgcagtct gtgcagcctg cagaagcaag aggagcagta  
300  
caaattactt atgaagtttg tcaggtcaac ggcagagact tatccagagc aactcatgac  
360  
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420  
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480  
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600  
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660  
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720

&lt;210&gt; 2666

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2666

Met	Gln	Ser	Val	Gln	Pro	Ala	Glu	Ala	Arg	Gly	Ala	Val	Gln	Ile	Thr
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Tyr	Glu	Val	Cys	Gln	Val	Asn	Gly	Arg	Asp	Leu	Ser	Arg	Ala	Thr	His
			20					25					30		
Asp	Gln	Ala	Val	Glu	Ala	Phe	Lys	Thr	Ala	Lys	Glu	Pro	Ile	Val	Val
			35				40					45			
Gln	Val	Leu	Arg	Arg	Thr	Pro	Arg	Thr	Lys	Met	Phe	Thr	Pro	Pro	Ser
			50				55					60			
Glu	Ser	Gln	Leu	Val	Asp	Thr	Gly	Thr	Gln	Thr	Asp	Ile	Thr	Phe	Glu
65					70					75				80	
His	Ile	Met	Ala	Leu	Thr	Lys	Met	Ser	Ser	Pro	Ser	Pro	Pro	Val	Leu
				85					90					95	
Asp	Pro	Tyr	Leu	Leu	Pro	Glu	Glu	His	Pro	Ser	Ala	His	Glu	Tyr	Tyr
			100					105					110		
Asp	Pro	Asn	Asp	Tyr	Ile	Gly	Asp	Ile	His	Gln	Glu	Met	Asp	Arg	Glu
			115				120					125			
Glu	Leu	Glu	Leu	Glu	Glu	Val	Asp	Leu	Tyr	Arg	Met	Asn	Ser	Gln	Asp
			130				135					140			
Lys	Leu	Gly	Leu	Thr	Val	Cys	Tyr	Arg							
145							150								

&lt;210&gt; 2667

&lt;211&gt; 289

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2667

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289

<210> 2668  
<211> 96  
<212> PRT  
<213> Homo sapiens

<400> 2668  
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Asn Pro Phe Ser Val Cys Pro Arg Trp Val Pro Gly Leu Cys Trp Arg  
35 40 45  
Thr Arg His Phe Lys Glu Ser Ile Lys Phe Ile His Glu Cys Arg Leu  
50 55 60  
Arg Gly Glu Ser Cys Leu Val His Cys Leu Ala Gly Val Ser Arg Ser  
65 70 75 80  
Val Thr Leu Val Ile Ala Tyr Ile Met Thr Val Thr Asp Phe Gly Trp  
85 90 95

<210> 2669  
<211> 4285  
<212> DNA  
<213> Homo sapiens

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240  
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420  
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480  
gacaaatgtg aaaatcacca tgaaaaactt agtgtatttt gctggacttg taagaagtgt  
540  
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600

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<210> 2670

<211> 979

<212> PRT

<213> Homo sapiens

<400> 2670

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Gln	Glu	Val	Glu	Arg	Asn	Val	Glu	Ala	Val	Arg	Asn	Ala	Lys	Asp	Glu
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Asp	Thr	Gln	Leu	Lys	Asn	Lys	Leu	Ile	Thr	Leu	Met	Gly	Gln	Lys	Thr
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Ser	Phe	Val	Thr	Thr	Pro	Val	Pro	Pro	Asp	Phe	Thr	Ser	Glu	Leu	Val		
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Pro	Ser	Tyr	Asp	Ser	Ala	Thr	Phe	Val	Leu	Glu	Asn	Phe	Ser	Thr	Leu		
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Ser Gly Asp Met Gln Thr Ser Leu Phe Ser Ala Asp Gln Ala Ala Leu		
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Ala Ala Cys Gly Thr Glu Asn Ser Gly Arg Leu Gln Asp Leu Gly Met		
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Glu Leu Leu Ala Lys Ser Ser Val Ala Asn Cys Tyr Ile Arg Asn Ser		
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Thr Asn Lys Lys Ser Asn Ser Pro Lys Pro Ala Arg Ser Ser Val Ala		
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Gly Ser Leu Ser Leu Arg Arg Ala Val Asp Pro Gly Glu Asn Ser Arg		
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Ser Lys Gly Asp Cys Gln Thr Leu Ser Glu Gly Ser Pro Gly Ser Ser		
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Gln Ser Gly Ser Arg His Ser Ser Pro Arg Ala Leu Ile His Gly Ser		
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Ile Gly Asp Ile Leu Pro Lys Thr Glu Asp Arg Gln Cys Lys Ala Leu		
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Asp Ser Asp Ala Val Val Val Ala Val Phe Ser Gly Leu Pro Ala Val		
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Glu Lys Arg Arg Lys Met Val Thr Leu Gly Ala Asn Ala Lys Gly Gly		
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 <213> Homo sapiens

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&lt;210&gt; 2672

&lt;211&gt; 223

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2672

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35 40 45  
Phe Ala Ile Leu Ser Pro Ser Pro Tyr Leu Arg Pro Arg Gly Arg Ala  
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His His Pro Pro Ser Arg Leu Gly Gly Gly Arg Ala Pro Ser Trp Pro  
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Arg Leu Ala Ser Thr Ala Ser Ser Arg Ser Thr Gln Met Arg Thr Val  
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&lt;210&gt; 2674

&lt;211&gt; 690

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2674

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Ser Gln His Gly Leu Asp Gly	Lys Lys Gly Gly Ser	Asn Leu Ile Pro
290	295	300
Leu Glu Gly Arg Asp Asp Met	Leu Asp Val Glu Thr Asp	Ala Tyr Ile
305	310	315
His Cys Val Ser Ala Phe Val	Lys Leu Ala Gln Ser	Glu Tyr Gln Leu
325	330	335
Leu Ala Asp Ile Ile Pro Glu	His His Gln Lys Lys Thr	Phe Asp Ser
340	345	350
Leu Ile Gln Asp Ala Leu Asp	Gly Leu Met Leu Glu Gly	Glu Asn Ile
355	360	365
Val Ser Ala Ala Arg Lys Ala	Ile Val Arg His Asp Phe	Ser Thr Val
370	375	380
Leu Thr Val Phe Pro Ile Leu	Arg His Leu Lys Gln Thr	Lys Pro Glu
385	390	395
Phe Asp Gln Val Leu Gln Gly	Thr Ala Ala Ser Thr Lys	Asn Lys Leu
405	410	415
Pro Gly Leu Ile Thr Ser Met	Glu Thr Ile Gly Ala Lys	Ala Leu Glu
420	425	430
Asp Phe Ala Asp Asn Ile Lys	Asn Asp Pro Asp Lys Glu	Tyr Asn Met
435	440	445
Pro Lys Asp Gly Thr Val His	Glu Leu Thr Ser Asn Ala	Ile Leu Phe
450	455	460
Leu Gln Gln Leu Leu Asp Phe	Gln Glu Thr Ala Gly Ala	Met Leu Ala
465	470	475
Ser Gln Glu Thr Ser Ser Ser	Ala Thr Ser Tyr Ser Ser	Glu Phe Ser
485	490	495
Lys Arg Leu Leu Ser Thr Tyr	Ile Cys Lys Val Leu Gly	Asn Leu Gln
500	505	510
Leu Asn Leu Leu Ser Lys Ser	Lys Val Tyr Glu Asp Pro	Ala Leu Ser
515	520	525
Ala Ile Phe Leu His Asn Asn	Tyr Asn Tyr Ile Leu Lys	Ser Leu Glu
530	535	540
Lys Ser Glu Leu Ile Gln Leu	Val Ala Val Thr Gln Lys	Thr Ala Glu
545	550	555
Arg Ser Tyr Arg Glu His Ile	Glu Gln Gln Ile Gln Thr	Tyr Gln Arg
565	570	575
Ser Trp Leu Lys Val Thr Asp	Tyr Ile Ala Glu Lys Asn	Leu Pro Val
580	585	590
Phe Gln Pro Gly Val Lys Leu	Arg Asp Lys Glu Arg Gln	Ile Ile Lys
595	600	605
Glu Arg Phe Lys Gly Phe Asn	Asp Gly Leu Glu Glu Leu	Cys Lys Ile
610	615	620
Gln Lys Ala Trp Ala Ile Pro	Asp Thr Glu Gln Arg Asp	Arg Ile Arg
625	630	635
Gln Ala Gln Lys Thr Ile Val	Lys Glu Thr Tyr Gly Ala	Phe Leu Gln
645	650	655
Lys Phe Gly Ser Val Pro Phe	Thr Lys Asn Pro Glu Lys	Tyr Ile Lys
660	665	670
Tyr Gly Val Glu Gln Val Gly	Asp Met Ile Asp Arg Leu	Phe Asp Thr
675	680	685
Ser Ala		



690

&lt;210&gt; 2675

&lt;211&gt; 711

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2675

agatctcagt gaagaggacc cttgttcact gtacctcatc aacttcctcc tggacgccac  
60  
tgtgggcatg ctgctcatct acgtgggggt gcgcgccgtc agcgtcctgg tagagtggca  
120  
gcagtgggag tccctgcgct tcggcgaata tggagaccct ctgcagtgtg gagcctgggt  
180  
cgggcagtgc gctctttaca tcgtgatcat gatttttgaa aagtctgtcg tcttcategt  
240  
cctcctccta ctccagtga aaaaggtggc cctattgaat ccaattgaaa accccgacct  
300  
gaagctggcc atcgctatgc tgatcgctcc cttctttgtc aacgctttga tgttttgggt  
360  
agtggacaat ttctcatga gaaaggggaa gacgaaagct aagctagaag aaaggggagc  
420  
caaccaggac tcgaggaatg ggagcaaggt ccgctaccgg agggccgcat cccacgagga  
480  
gtctgagtct gagatcctga tctcagcggg tgatgagatg gaggagtccg acgtggagga  
540  
ggacctccgc agactgacct cctcaagcc tgtgaagaaa aagaagcacc gctttgggct  
600  
accggtatga cacattccca tgctgggggt gacgggaggg ccccgccagc cgctgggtgtg  
660  
cagaggtcat cccacagcat cgttccttac cctctctctg cccttcaccc g  
711

&lt;210&gt; 2676

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2676

Met	Leu	Leu	Ile	Tyr	Val	Gly	Val	Arg	Ala	Val	Ser	Val	Leu	Val	Glu
1			5					10					15		
Trp	Gln	Gln	Trp	Glu	Ser	Leu	Arg	Phe	Gly	Glu	Tyr	Gly	Asp	Pro	Leu
		20					25					30			
Gln	Cys	Gly	Ala	Trp	Val	Gly	Gln	Cys	Ala	Leu	Tyr	Ile	Val	Ile	Met
	35					40					45				
Ile	Phe	Glu	Lys	Ser	Val	Val	Phe	Ile	Val	Leu	Leu	Leu	Leu	Gln	Trp
	50				55					60					
Lys	Lys	Val	Ala	Leu	Leu	Asn	Pro	Ile	Glu	Asn	Pro	Asp	Leu	Lys	Leu
65				70					75					80	
Ala	Ile	Val	Met	Leu	Ile	Val	Pro	Phe	Phe	Val	Asn	Ala	Leu	Met	Phe
		85					90					95			
Trp	Val	Val	Asp	Asn	Phe	Leu	Met	Arg	Lys	Gly	Lys	Thr	Lys	Ala	Lys
		100					105					110			
Leu	Glu	Glu	Arg	Gly	Ala	Asn	Gln	Asp	Ser	Arg	Asn	Gly	Ser	Lys	Val

115 120 125  
Arg Tyr Arg Arg Ala Ala Ser His Glu Glu Ser Glu Ser Glu Ile Leu  
130 135 140  
Ile Ser Ala Asp Asp Glu Met Glu Glu Ser Asp Val Glu Glu Asp Leu  
145 150 155 160  
Arg Arg Leu Thr Pro Leu Lys Pro Val Lys Lys Lys Lys His Arg Phe  
165 170 175  
Gly Leu Pro Val  
180

<210> 2677  
<211> 735  
<212> DNA  
<213> Homo sapiens

<400> 2677  
ngcgcgccag gaccgctcct gcaccgaggg tgcccgcgcg gctatggagg ccttccagag  
60  
ggccgctggg gaggcgggcc cgggcccgcg tggggcacgg cgcggtgccg ggggtgttga  
120  
gagccccctt tgcagggcag gagctgggga gtgggttagga catcagtcct tcaggtaggg  
180  
ggagtgcagc catcaggtcc atatgtgtcc caggagcatc cctagctggc cgccctgagt  
240  
gctgcatggg gcagagatgg gcaggtacac ggccctgcct gtgtgagcac ccctccctcc  
300  
gctggggcct tcagcctcct gaggggagaac ttctcccatg cgccgagccc agacatgagc  
360  
gctgcgtccc tctgcgcact ggagcagctc atgatggccc agggccagga atgtgtgttt  
420  
gagggcctct caccacctgc ctccatggcc ccccaagact gcctggccca gctgcgcctg  
480  
gcgcaggagg ccgcccaggt gagctcgggc acccgtgtca ggatgcaggg ggtggggccg  
540  
agctggggtc agagcccagg tccaggcatg cgtgagctct cccacctcct tccttgtgtg  
600  
tcagccccga gccagctgtt gtcctgtctc ctgggggggc tggtcaggaa cctggggacc  
660  
cgagcctctg cctccaggga atggcacaaa gcagcaggaa ctgaggtgcc agggaggctg  
720  
ctgggatggg ggtcg  
735

<210> 2678  
<211> 170  
<212> PRT  
<213> Homo sapiens

<400> 2678  
Leu Ala Ala Leu Ser Ala Ala Trp Gly Arg Asp Gly Gln Val His Gly  
1 5 10 15  
Pro Ala Cys Val Ser Thr Pro Pro Ser Ala Gly Ala Phe Ser Leu Leu  
20 25 30  
Arg Glu Asn Phe Ser His Ala Pro Ser Pro Asp Met Ser Ala Ala Ser

```

      35      40      45
Leu Cys Ala Leu Glu Gln Leu Met Met Ala Gln Ala Gln Glu Cys Val
      50      55      60
Phe Glu Gly Leu Ser Pro Pro Ala Ser Met Ala Pro Gln Asp Cys Leu
65      70      75      80
Ala Gln Leu Arg Leu Ala Gln Glu Ala Ala Gln Val Ser Ser Gly Thr
      85      90      95
Arg Val Arg Met Gln Gly Val Gly Pro Ser Trp Gly Gln Ser Pro Gly
      100      105      110
Pro Gly Met Arg Glu Leu Ser His Leu Leu Pro Cys Val Ser Ala Pro
      115      120      125
Ser Gln Leu Leu Ser Cys Ser Leu Gly Gly Leu Val Arg Asn Leu Gly
      130      135      140
Thr Arg Ala Ser Ala Ser Arg Glu Trp His Lys Ala Ala Gly Thr Glu
145      150      155      160
Val Pro Gly Arg Leu Leu Gly Trp Trp Ser
      165      170

```

&lt;210&gt; 2679

&lt;211&gt; 560

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2679

```

agccgcccc cctcctgttc cattataatc ttattttggt tatgttgata caacacaatc
60
tgtccttcca agtgatcacc ggagtcacga tatttctgtc aagtcagcca accaggaagg
120
ggctgcagac aaagtgcggc aacagggact ccaccaggcc atggagctca tcccacaaga
180
cgcctcaccg cacaggaggg ctgacccag ggaacgtgt caccaggaca cagcacgaag
240
ctcaaaaggg gctagcatgc tctgtgcagc tgccagactc tgccctgaag aatcacaggg
300
cactctagtg agcgctgcag cagccagcag gccctggatg gccaggtgtg cagtggggag
360
gcacagggggg tgcaccagga cgcagccaga cctgggccag ttgcgcccga ctcttctcca
420
ttccagaggt ccaggaagca cctgtcaatg tggaagtcag aatgctcagg ccaaataaccg
480
agatcaacta actattcagg ttgaaccaga ggcctgggag ggggcatcca actgcccacc
540
cgtcagactg agggacgcgt
560

```

&lt;210&gt; 2680

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2680

```

Met Glu Leu Ile Pro Gln Asp Ala Ser Pro His Arg Arg Ala Asp Pro
1      5      10      15
Arg Glu Thr Cys His Gln Asp Thr Ala Arg Ser Ser Lys Gly Ala Ser

```

```

      20      25      30
Met Leu Cys Ala Ala Ala Arg Leu Cys Pro Glu Glu Ser Gln Gly Thr
      35      40      45
Leu Val Ser Ala Ala Ala Ala Ser Arg Pro Trp Met Ala Arg Cys Ala
      50      55      60
Val Gly Arg His Arg Gly Cys Thr Arg Thr Gln Pro Asp Leu Gly Gln
      65      70      75      80
Phe Ala Pro Thr Leu Leu His Ser Arg Gly Pro Gly Ser Thr Cys Gln
      85      90      95
Cys Gly Ser Gln Asn Ala Gln Ala Lys Tyr Arg Asp Gln Leu Thr Ile
      100      105      110
Gln Val Glu Pro Glu Ala Trp Ala Gly Ala Ser Asn Cys Pro Pro Val
      115      120      125
Arg Leu Arg Asp Ala
      130

```

<210> 2681  
 <211> 585  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2681
gattctctag tagccctaattctacccatc tggctactaa ttcaaacttt cttccttcac
60
atctgtttgt ggacttctcc aatataacta gtatgcctgg gctcattctg cttcttctct
120
tctggaatag tttatttcat gaccatgtgc agagggggtg atggggcaag cctcacaagc
180
cccgagggtc tgtggctgag gtgtaccttg gctttgttgc ctggaactgc tctgactctg
240
ctcttcgctc tttcctgggc tgtgtcacta cagctctgac tcctttccac cttggagttt
300
agcttccctg ccaggaaagc taaggagtag gagttgttct tggaaacaaa tgccgagcga
360
tgtgtctgtg tcatctggcc tcgagaaggt tcttcattct ctgaatctga gagacgtgca
420
ggacaacggt ccagatttgt tttcagtact aatgggtcat ctcttttttt ctgttcatcc
480
atcttccctt tcctgtttc tgtatcctct ggtaacagct tgtggatttg atcttcagag
540
ggtttttctt cttgtaactt ttcttctctc agctttctca agctt
585

```

<210> 2682  
 <211> 116  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2682
Met Asp Glu Gln Lys Lys Arg Asp Glu Pro Leu Val Leu Lys Thr Asn
1      5      10      15
Leu Glu Arg Cys Pro Ala Arg Leu Ser Asp Ser Glu Asn Glu Glu Pro
20      25      30
Ser Arg Gly Gln Met Thr Gln Thr His Arg Ser Ala Phe Val Ser Lys

```

```

      35          40          45
Asn Asn Ser Tyr Ser Leu Ala Phe Leu Ala Gly Lys Leu Asn Ser Lys
  50          55          60
Val Glu Arg Ser Gln Ser Cys Ser Asp Thr Ala Gln Glu Arg Ala Lys
65          70          75          80
Ser Arg Val Arg Ala Val Pro Gly Asn Lys Ala Lys Val His Leu Ser
      85          90          95
His Arg Pro Pro Gly Leu Val Arg Leu Ala Pro Ser Pro Pro Leu His
      100          105          110
Met Val Met Lys
      115

```

<210> 2683  
 <211> 498  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2683
naccggttac actgactcca aaactctcct tgggtggccta ggtgaaacct catggccaac
60
atcacctgga tggccaacca cactggaagg ttggatttca tcctcatggg actcttcaga
120
cgatccaaac atccagctct acttagtggtg gtcattcttg tggttttcct gatggcggtg
180
tctgaaaatg ctgtctgat ccttctgata cactgtgaca cctacctcca ccccccatg
240
tactttttca tcagtcaatt gtctctcatg gacatggcgt acatttctgt cactgtgccc
300
aagatgctcc tggaccaggt catgggtgtg aataagatct cagcccctga gtgtgggatg
360
cagatgttcc tctatctgac actagcaggt tcggaatttt tccttctagc caccatggcc
420
tatgaccgct acgtggccat ctgccatcct ctccgttacc ctgtcctcat gaaccatagg
480
gtctgtcttt tcctggca
498

```

<210> 2684  
 <211> 149  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2684
Met Ala Asn Ile Thr Trp Met Ala Asn His Thr Gly Arg Leu Asp Phe
  1          5          10          15
Ile Leu Met Gly Leu Phe Arg Arg Ser Lys His Pro Ala Leu Leu Ser
      20          25          30
Val Val Ile Phe Val Val Phe Leu Met Ala Leu Ser Glu Asn Ala Val
      35          40          45
Leu Ile Leu Leu Ile His Cys Asp Thr Tyr Leu His Thr Pro Met Tyr
      50          55          60
Phe Phe Ile Ser Gln Leu Ser Leu Met Asp Met Ala Tyr Ile Ser Val
65          70          75          80
Thr Val Pro Lys Met Leu Leu Asp Gln Val Met Gly Val Asn Lys Ile

```

85 90 95  
Ser Ala Pro Glu Cys Gly Met Gln Met Phe Leu Tyr Leu Thr Leu Ala  
100 105 110  
Gly Ser Glu Phe Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Tyr Val  
115 120 125  
Ala Ile Cys His Pro Leu Arg Tyr Pro Val Leu Met Asn His Arg Val  
130 135 140  
Cys Leu Phe Leu Ala  
145

&lt;210&gt; 2685

&lt;211&gt; 391

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2685

ngccggctgc acacgctgcc acctgggctg cctcgaaatg tccatgtgct gaaggtcaag  
60  
cgcaatgagc tggtgacctt ggcacgaggg gcgctggcgg gcatggctca gcttcgggaa  
120  
ctctacctca caggcaaccg actgcgaagc cgggccctgg gcccccgctc ctgggtggac  
180  
ctcgcccatc tgcagttgct ggacatcgcc gggaatcagc tcacagagat cccggagggg  
240  
ctccccccat cgctggagta tctgtacctg cagaataaca agattagcgc tgttcctgcc  
300  
agcgcttttg actctactcc caacctcaag gggatctttc tcaggttcaa caagctggct  
360  
gtgggctccg tagtagaaag cgccttccgg a  
391

&lt;210&gt; 2686

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2686

Xaa Arg Leu His Thr Leu Pro Pro Gly Leu Pro Arg Asn Val His Val  
1 5 10 15  
Leu Lys Val Lys Arg Asn Glu Leu Ala Leu Ala Arg Gly Ala Leu  
20 25 30  
Ala Gly Met Ala Gln Leu Arg Glu Leu Tyr Leu Thr Gly Asn Arg Leu  
35 40 45  
Arg Ser Arg Ala Leu Gly Pro Arg Ala Trp Val Asp Leu Ala His Leu  
50 55 60  
Gln Leu Leu Asp Ile Ala Gly Asn Gln Leu Thr Glu Ile Pro Glu Gly  
65 70 75 80  
Leu Pro Pro Ser Leu Glu Tyr Leu Tyr Leu Gln Asn Asn Lys Ile Ser  
85 90 95  
Ala Val Pro Ala Ser Ala Phe Asp Ser Thr Pro Asn Leu Lys Gly Ile  
100 105 110  
Phe Leu Arg Phe Asn Lys Leu Ala Val Gly Ser Val Val Glu Ser Ala  
115 120 125  
Phe Arg

130

&lt;210&gt; 2687

&lt;211&gt; 399

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2687

nagtgaaga aatgtttaat acaagagatt gaaccctacc aaaatgggag gtttagcctc  
60  
caggaatggg agtgcaataa atctctaata caagagattg agcctcacca acctccagga  
120  
tggaatga caggtaagac agggactaca aaagaccaag cagacaataa aattccccct  
180  
gacagtccgc taggccttat gttaagatac cggaagata atgaaaggac caaacacaag  
240  
aaaagacagc aaatgataaa atattgctgg tttatttggg ctaaggaacc catcctgaaa  
300  
cctttgggtct tttggccaca gttagggttg agcggggact ggatatgcca actcctaate  
360  
cagtatgtaa aggataaaag tccagtttct caagaggag  
399

&lt;210&gt; 2688

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2688

Met	Thr	Gly	Lys	Thr	Gly	Thr	Thr	Lys	Asp	Gln	Ala	Asp	Asn	Lys	Ile
1			5					10					15		
Pro	Pro	Asp	Ser	Pro	Leu	Gly	Leu	Met	Leu	Arg	Tyr	Arg	Lys	Asp	Asn
		20						25					30		
Glu	Arg	Thr	Lys	His	Lys	Lys	Arg	Gln	Gln	Met	Ile	Lys	Tyr	Cys	Trp
		35					40					45			
Phe	Ile	Trp	Thr	Lys	Glu	Pro	Ile	Leu	Lys	Pro	Leu	Val	Phe	Trp	Pro
	50					55					60				
Gln	Leu	Gly	Leu	Ser	Gly	Asp	Trp	Ile	Cys	Gln	Leu	Leu	Ile	Gln	Tyr
65				70					75					80	
Val	Lys	Asp	Lys	Ser	Pro	Val	Ser	Gln	Glu	Glu					
			85					90							

&lt;210&gt; 2689

&lt;211&gt; 560

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2689

gcacccattc aagttgggtt agttggcttc tgtttggtgt ttgctacacc cctgtgttgt  
60  
gccctgtttc ctcagaaaag atacaaaaat gtgggtctca ccaagttgcc caggctggtc  
120  
tcaaactcct ggcctcaaga aatcctcctg gttcagcctc acaaagctcc gagattacag  
180

1927

ttgcatgtct gtgacaagct tggaggccga gttgcaagct aagatccaag agagccatcc  
240  
tgaattgcga cgcgtgtact tcaataaggg attgtaaagc agggaggaaa cctctgcagc  
300  
tcattctgcc actgcaaagc tgggtgtagcc atgctgggtga gaaaaatcct gttcaacctg  
360  
ggttgggtata tcgtctttga aaaacaatga ctataaaagc tacaggaaag gtatttcagg  
420  
acgtttattg aaggcattgg tggagctctc tgtatgtgtt ttgctctgca gggaaactca  
480  
agttggcatt cccgtcacgg atgagaatgg gaaccgcttg ggggagtcgg cgaacgctgc  
540  
gaaacaagcc atcacgccag  
560

<210> 2690  
<211> 73  
<212> PRT  
<213> Homo sapiens

<400> 2690  
Ala Pro Ile Gln Val Gly Leu Val Gly Phe Cys Leu Val Phe Ala Thr  
1 5 10 15  
Pro Leu Cys Cys Ala Leu Phe Pro Gln Lys Arg Tyr Lys Asn Val Gly  
20 25 30  
Leu Thr Lys Leu Pro Arg Leu Val Ser Asn Ser Trp Pro Gln Glu Ile  
35 40 45  
Leu Leu Val Gln Pro His Lys Ala Pro Arg Leu Gln Leu His Val Cys  
50 55 60  
Asp Lys Leu Gly Gly Arg Val Ala Ser  
65 70

<210> 2691  
<211> 532  
<212> DNA  
<213> Homo sapiens

<400> 2691  
gatctcatct gtacacactt catggatggc atgaatgagc tggcgattgc ttacatcctg  
60  
caggggggtgc tgaaggccct cgactacatc caccacatgg gatatgtaca caggagtgtc  
120  
aaagccagcc acatcctgat ctctgtggat ggggaaggctt acctgtctgg ttgctgcagc  
180  
aacctcagca tgataagcca tgggcagcgg cagcgagtgg tccacgattt tcccaagtac  
240  
agtgtcaagg ttctgccgtg gctcagcccc gaggtcctcc agcagaatct ccagggttat  
300  
gatgccaaagt ctgacatcta cagtgtggga atcacagcct gtgaactggc caacggccat  
360  
gtccccctta aggatatgcc tgccaccag atgctgctag agaaactgaa cggcacagtg  
420  
ccctgcctgt tggataccag caccatcccc gctgaggagc tgacatgag cccttcgcgc  
480



tcagtggcca actctggcct gactgacagc ctgaccacca gcacaccccg gg  
532

<210> 2692  
<211> 177  
<212> PRT  
<213> Homo sapiens

<400> 2692  
Asp Leu Ile Cys Thr His Phe Met Asp Gly Met Asn Glu Leu Ala Ile  
1 5 10 15  
Ala Tyr Ile Leu Gln Gly Val Leu Lys Ala Leu Asp Tyr Ile His His  
20 25 30  
Met Gly Tyr Val His Arg Ser Val Lys Ala Ser His Ile Leu Ile Ser  
35 40 45  
Val Asp Gly Lys Val Tyr Leu Ser Gly Leu Arg Ser Asn Leu Ser Met  
50 55 60  
Ile Ser His Gly Gln Arg Gln Arg Val Val His Asp Phe Pro Lys Tyr  
65 70 75 80  
Ser Val Lys Val Leu Pro Trp Leu Ser Pro Glu Val Leu Gln Gln Asn  
85 90 95  
Leu Gln Gly Tyr Asp Ala Lys Ser Asp Ile Tyr Ser Val Gly Ile Thr  
100 105 110  
Ala Cys Glu Leu Ala Asn Gly His Val Pro Phe Lys Asp Met Pro Ala  
115 120 125  
Thr Gln Met Leu Leu Glu Lys Leu Asn Gly Thr Val Pro Cys Leu Leu  
130 135 140  
Asp Thr Ser Thr Ile Pro Ala Glu Glu Leu Thr Met Ser Pro Ser Arg  
145 150 155 160  
Ser Val Ala Asn Ser Gly Leu Ser Asp Ser Leu Thr Thr Ser Thr Pro  
165 170 175  
Arg

<210> 2693  
<211> 798  
<212> DNA  
<213> Homo sapiens

<400> 2693  
gcgttccaga atctcaccag ccttgtggtg ctgcatttgc ataacaaccg catccagcat  
60  
ctggggaccc acagcttcga ggggctgcac aatctggaga cactagacct gaattataac  
120  
aagctgcagg agttccctgt ggccatccgg accctgggca gactgcagga actgggggttc  
180  
cataacaaca acatcaaggc catcccagaa aaggccttca tggggaaccc tctgctacag  
240  
acgatacact tttatgataa cccaatccag tttgtgggaa gatcggcatt ccagtacctg  
300  
cctaaactcc acacactatc tctgaatggt gccatggaca tccaggagtt tccagatctc  
360  
aaaggcacca ccagcctgga gatcctgacc ctgaccgcg caggcatccg gctgctccca  
420

tcggggatgt gccaacagct gcccaggctc cgagtcctgg aactgtctca caatcaaatt  
 480  
 gaggagctgc ccagcctgca caggtgtcag aaattggagg aaatcggcct ccaacacaac  
 540  
 cgcacatctggg aaattggagc tgacaccttc agccagctga gctccctgca agccctggat  
 600  
 ttaaggtgga acgccatccg gtccatccac cccgaggcct tctccaccct gcactccctg  
 660  
 gtcaagctgg acctgacaga caaccagctg accacactgc ccctggctgg acttgggggc  
 720  
 ttgatgcac tgaagctcaa agggaaacctt gctctctccc aggccttctc caaggacagt  
 780  
 ttcccaaaac tgaggatc  
 798

<210> 2694

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2694

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Glu	Thr	Leu	Asp	Leu	Asn	Tyr	Asn	Lys	Leu	Gln	Glu	Phe	Pro	Val	Ala
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Thr	Ile	His	Phe	Tyr	Asp	Asn	Pro	Ile	Gln	Phe	Val	Gly	Arg	Ser	Ala
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Phe	Gln	Tyr	Leu	Pro	Lys	Leu	His	Thr	Leu	Ser	Leu	Asn	Gly	Ala	Met
		100					105					110			
Asp	Ile	Gln	Glu	Phe	Pro	Asp	Leu	Lys	Gly	Thr	Thr	Ser	Leu	Glu	Ile
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Leu	Thr	Leu	Thr	Arg	Ala	Gly	Ile	Arg	Leu	Leu	Pro	Ser	Gly	Met	Cys
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Gln	Gln	Leu	Pro	Arg	Leu	Arg	Val	Leu	Glu	Leu	Ser	His	Asn	Gln	Ile
145				150					155					160	
Glu	Glu	Leu	Pro	Ser	Leu	His	Arg	Cys	Gln	Lys	Leu	Glu	Glu	Ile	Gly
		165						170					175		
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	180						185					190			
Leu	Ser	Ser	Leu	Gln	Ala	Leu	Asp	Leu	Arg	Trp	Asn	Ala	Ile	Arg	Ser
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Ile	His	Pro	Glu	Ala	Phe	Ser	Thr	Leu	His	Ser	Leu	Val	Lys	Leu	Asp
	210					215					220				
Leu	Thr	Asp	Asn	Gln	Leu	Thr	Thr	Leu	Pro	Leu	Ala	Gly	Leu	Gly	Gly
225				230					235					240	
Leu	Met	His	Leu	Lys	Leu	Lys	Gly	Asn	Leu	Ala	Leu	Ser	Gln	Ala	Phe
		245						250					255		
Ser	Lys	Asp	Ser	Phe	Pro	Lys	Leu	Arg	Ile						

260

265

&lt;210&gt; 2695

&lt;211&gt; 2265

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2695

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1931

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<210> 2696  
<211> 663  
<212> PRT  
<213> Homo sapiens

<400> 2696  
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Ala Pro Glu Asp Cys Thr Ser Phe Ser Ile Asn Ala Ser Pro Gly Val  
35 40 45  
Val Val Asp Ile Ala His Ser Pro Pro Ala Lys Lys Lys Ser Thr Gly  
50 55 60  
Ser Ser Thr Trp Pro Leu Asp Pro Gly Val Glu Val Thr Leu Thr Met  
65 70 75 80  
Lys Ala Ala Ser Gly Ser Thr Gly Asp Gln Lys Val Gln Ile Ser Tyr  
85 90 95  
Tyr Gly Pro Lys Thr Pro Pro Val Lys Ala Leu Leu Tyr Leu Thr Ala  
100 105 110  
Val Glu Ile Ser Leu Cys Ala Asp Ile Thr Arg Thr Gly Lys Val Lys  
115 120 125  
Pro Thr Arg Ala Val Lys Asp Gln Arg Thr Trp Thr Trp Gly Pro Cys

130 135 140  
Gly Gln Gly Ala Ile Leu Leu Val Asn Cys Asp Arg Asp Asn Leu Glu  
145 150 155 160  
Ser Ser Ala Met Asp Cys Glu Asp Asp Glu Val Leu Asp Ser Glu Asp  
165 170 175  
Leu Gln Asp Met Ser Leu Met Thr Leu Ser Thr Lys Thr Pro Lys Asp  
180 185 190  
Phe Phe Thr Asn His Thr Leu Val Leu His Val Ala Arg Ser Glu Met  
195 200 205  
Asp Lys Val Arg Val Phe Gln Ala Thr Arg Gly Lys Leu Ser Ser Lys  
210 215 220  
Cys Ser Val Val Leu Gly Pro Lys Trp Pro Ser His Tyr Leu Met Val  
225 230 235 240  
Pro Gly Gly Lys His Asn Met Asp Phe Tyr Val Glu Ala Leu Ala Phe  
245 250 255  
Pro Asp Thr Asp Phe Pro Gly Leu Ile Thr Leu Thr Ile Ser Leu Leu  
260 265 270  
Asp Thr Ser Asn Leu Glu Leu Pro Glu Ala Val Val Phe Gln Asp Ser  
275 280 285  
Val Val Phe Arg Val Ala Pro Trp Ile Met Thr Pro Asn Thr Gln Pro  
290 295 300  
Pro Gln Glu Val Tyr Ala Cys Ser Ile Phe Glu Asn Glu Asp Phe Leu  
305 310 315 320  
Lys Ser Val Thr Thr Leu Ala Met Lys Ala Lys Cys Lys Leu Thr Ile  
325 330 335  
Cys Pro Glu Glu Glu Asn Met Asp Asp Gln Trp Met Gln Asp Glu Met  
340 345 350  
Glu Ile Gly Tyr Ile Gln Ala Pro His Lys Thr Leu Pro Val Val Phe  
355 360 365  
Asp Ser Pro Arg Asn Arg Gly Leu Lys Glu Phe Pro Ile Lys Arg Val  
370 375 380  
Met Gly Pro Asp Phe Gly Tyr Val Thr Arg Gly Pro Gln Thr Gly Gly  
385 390 395 400  
Ile Ser Gly Leu Asp Ser Phe Gly Asn Leu Glu Val Ser Pro Pro Val  
405 410 415  
Thr Val Arg Gly Lys Glu Tyr Pro Leu Gly Arg Ile Leu Phe Gly Asp  
420 425 430  
Ser Cys Tyr Pro Ser Asn Asp Ser Arg Gln Met His Gln Ala Leu Gln  
435 440 445  
Asp Phe Leu Ser Ala Gln Gln Val Gln Ala Pro Val Lys Leu Tyr Ser  
450 455 460  
Asp Trp Leu Ser Val Gly His Val Asp Glu Phe Leu Ser Phe Val Pro  
465 470 475 480  
Ala Pro Asp Arg Lys Gly Phe Arg Leu Leu Leu Ala Ser Pro Arg Ser  
485 490 495  
Cys Tyr Lys Leu Phe Gln Glu Gln Gln Asn Glu Gly His Gly Glu Ala  
500 505 510  
Leu Leu Phe Glu Gly Ile Lys Lys Lys Lys Gln Gln Lys Ile Lys Asn  
515 520 525  
Ile Leu Ser Asn Lys Thr Leu Arg Glu His Asn Ser Phe Val Glu Arg  
530 535 540  
Cys Ile Asp Trp Asn Arg Glu Leu Leu Lys Arg Glu Leu Gly Leu Ala  
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<211> 2468
<212> DNA
<213> Homo sapiens
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1020

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&lt;210&gt; 2698

&lt;211&gt; 332

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2698

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 Gly Arg Ala Asn His Phe Phe Thr Val Thr Asp Pro Arg Asn Ile Leu  
 35 40 45  
 Leu Thr Asn Glu Gln Leu Glu Ser Ala Arg Lys Ile Val His Asp Tyr  
 50 55 60  
 Arg Gln Gly Ile Val Pro Pro Gly Leu Thr Glu Asn Glu Leu Trp Arg  
 65 70 75 80  
 Ala Lys Tyr Ile Tyr Asp Ser Ala Phe His Pro Asp Thr Gly Glu Lys  
 85 90 95  
 Met Ile Leu Ile Gly Arg Met Ser Ala Gln Val Pro Met Asn Met Thr  
 100 105 110  
 Ile Thr Gly Cys Met Met Thr Phe Tyr Arg Thr Thr Pro Ala Val Leu  
 115 120 125  
 Phe Trp Gln Trp Ile Asn Gln Ser Phe Asn Ala Val Val Asn Tyr Thr  
 130 135 140  
 Asn Arg Ser Gly Asp Ala Pro Leu Thr Val Asn Glu Leu Gly Thr Ala  
 145 150 155 160  
 Tyr Val Ser Ala Thr Thr Gly Ala Val Ala Thr Ala Leu Gly Leu Asn  
 165 170 175  
 Ala Leu Thr Lys His Val Ser Pro Leu Ile Gly Arg Phe Val Pro Phe  
 180 185 190  
 Ala Ala Val Ala Ala Ala Asn Cys Ile Asn Ile Pro Leu Met Arg Gln  
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 Arg Glu Leu Lys Val Gly Ile Pro Val Thr Asp Glu Asn Gly Asn Arg  
 210 215 220  
 Leu Gly Glu Ser Ala Asn Ala Ala Lys Gln Ala Ile Thr Gln Val Val  
 225 230 235 240  
 Val Ser Arg Ile Leu Met Ala Ala Pro Gly Met Ala Ile Pro Pro Phe  
 245 250 255  
 Ile Met Asn Thr Leu Glu Lys Lys Ala Phe Leu Lys Arg Phe Pro Trp  
 260 265 270  
 Met Ser Ala Pro Ile Gln Val Gly Leu Val Gly Phe Cys Leu Val Phe  
 275 280 285  
 Ala Thr Pro Leu Cys Cys Ala Leu Phe Pro Gln Lys Ser Ser Met Ser  
 290 295 300  
 Val Thr Ser Leu Glu Ala Glu Leu Gln Ala Lys Ile Gln Glu Ser His  
 305 310 315 320  
 Pro Glu Leu Arg Arg Val Tyr Phe Asn Lys Gly Leu  
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&lt;210&gt; 2699

&lt;211&gt; 974

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2699

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360  
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420  
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aaaaaaaaaa aaaa  
974

&lt;210&gt; 2700

&lt;211&gt; 177

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2700

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			20					25						30	
Thr	Gln	Pro	Ala	Asp	Val	Leu	Arg	Trp	Ser	Ala	Gly	Tyr	Phe	Ser	Ala
		35					40					45			
Leu	Ser	Arg	Gly	Asp	Pro	Leu	Pro	Val	Lys	Asp	Arg	Met	Glu	Met	Pro
	50					55					60				
Val	Ala	Thr	Gln	Lys	Thr	Asp	Thr	Gly	Leu	Thr	Gln	Gly	Leu	Leu	Lys
65					70				75					80	
Val	Leu	His	Lys	Gln	Cys	His	His	Lys	Arg	Tyr	Val	Glu	Leu	Thr	Asp
			85					90						95	
Leu	Glu	Gln	Lys	Trp	Lys	Asn	Leu	Cys	Leu	Pro	Lys	Glu	Lys	Phe	Lys
			100					105						110	
Ala	Leu	Leu	Gln	Leu	Asp	Pro	Cys	Glu	Asn	Lys	Ile	Lys	Trp	Ile	Asn

115 120 125  
 Phe Leu Ala Leu Gly Cys Ser Met Leu Gly Gly Ser Leu Asn Thr Ala  
 130 135 140  
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 165 170 175  
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<210> 2701  
 <211> 646  
 <212> DNA  
 <213> Homo sapiens

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 646

<210> 2702  
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 <212> PRT  
 <213> Homo sapiens

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 Glu Arg Ile Ala Leu Phe Leu Gln Asn Glu Glu Phe Met Lys Glu Leu  
 35 40 45  
 Gln Arg Asn Arg Asp Phe Leu Leu Ala Leu Glu Arg Asp Arg Leu Lys  
 50 55 60  
 Tyr Glu Ser Gln Lys Ser Lys Ser Ser Ser Val Ala Val Gly Asn Asp

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                              85                                90

<210> 2703  
<211> 610  
<212> DNA  
<213> Homo sapiens

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<211> 108  
<212> PRT  
<213> Homo sapiens

<400> 2704  
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Lys Ala Ile Lys Ala Gly Ile Lys Cys Lys Pro Pro Leu Cys Ser Asn  
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Gly Pro Lys Gly Glu Ala Ser Lys Phe Pro Leu Phe Phe Asp Leu Ser  
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<212> PRT  
<213> Homo sapiens

<400> 2706  
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165 170 175  
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<210> 2707  
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<212> DNA  
<213> Homo sapiens

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<211> 337

<212> PRT

<213> Homo sapiens

<400> 2708

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Gly	Gly	Lys	Ile	Asp	Val	Ser	Leu	Asn	Ile	Ser	Leu	Pro	Asn	Leu	His	115	120	125	
Cys	Glu	Leu	Val	Gly	Leu	Asp	Ile	Gln	Asp	Glu	Met	Gly	Arg	His	Glu	130	135	140	
Val	Gly	His	Ile	Asp	Asn	Ser	Met	Lys	Ile	Pro	Leu	Asn	Asn	Gly	Ala	145	150	155	160
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Met	Thr	His	Val	Ile	His	Lys	Leu	Ser	Phe	Gly	Asp	Thr	Leu	Gln	Val	195	200	205	
Gln	Asn	Ile	His	Gly	Ala	Phe	Asn	Ala	Leu	Gly	Gly	Ala	Asp	Arg	Leu	210	215	220	
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 Ile Pro Ala Ile Trp Phe Arg Tyr Asp Leu Ser Pro Ile Thr Val Lys  
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 Tyr Thr Glu Arg Arg Gln Pro Leu Tyr Arg Phe Ile Thr Thr Ile Cys  
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 Ala Ile Ile Gly Gly Thr Phe Thr Val Ala Gly Ile Leu Asp Ser Cys  
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 <212> DNA  
 <213> Homo sapiens

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<212> PRT  
<213> Homo sapiens

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Ser Gly Ser Ser Thr Lys Asn Ile Trp Val Ser Gly Leu Ser Ser Asn  
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Thr Lys Ala Ala Asp Leu Lys Asn Leu Phe Gly Lys Tyr Gly Lys Val  
100 105 110  
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115 120 125  
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Ala His Leu His Arg Thr Glu Leu His Gly Gln Leu Ile Ser Val Glu  
145 150 155 160  
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Glu Lys Ser Ser Ser Arg Ser Ser Gly Asp Lys Lys Asn Thr Ser Asp  
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Arg Ser Ser Lys Thr Gln Ala Ser Val Lys Lys Glu Glu Lys Arg Ser  
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&lt;211&gt; 2096

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2712

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<212> PRT

<213> Homo sapiens

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		180						185				190			
Lys	Asn	Gly	Val	Pro	Asn	Phe	Leu	Lys	Asp	Met	Ala	Arg	Ala	Cys	Gln
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180  
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240  
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378

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<212> PRT  
<213> Homo sapiens

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Gln Arg Gly Asp Leu Ser Asp Val Glu Glu Glu Glu Glu Met  
35 40 45  
Asp Val Asp Glu Ala Thr Gly Ala Val Lys Lys His Asn Gly Val Gly  
50 55 60  
Gly Ser Pro Pro Lys Ser Lys Leu Leu Phe Ser Asn Thr Ala Ala Gln  
65 70 75 80  
Lys Leu Arg Gly Met Asp Glu Val Tyr Asn Leu Phe Tyr Val Asn Asn  
85 90 95  
Asn Trp Tyr Ile Phe Met Arg Leu His Gln Ile Leu Cys Leu Arg Leu  
100 105 110  
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115 120 125

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<212> DNA  
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1980  
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Glu Gly Pro Arg Pro Glu Asn Thr Leu Gly Leu Ser Ser Pro Ala Gln  
35 40 45  
Thr Thr Gly Glu Gly Ala Gly His Arg Pro Leu Thr Ile Leu His Pro  
50 55 60  
Lys Thr Gly Gly Gln Gly Ser Asp Ala Thr Leu Leu Phe Val Lys Tyr  
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Gly Thr Thr Phe Phe Val Leu Phe Glu Val Ser Ser Gly Ser Lys Leu  
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Ala Pro Glu Ser Met Gly Ser Glu Asp Met Leu Phe Met Leu Tyr Thr  
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Ser Gly Ser Thr Gly Met Pro Lys Gly Ile Val His Thr Gln Ala Gly  
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Tyr Leu Leu Tyr Ala Ala Leu Thr His Lys Leu Val Phe Asp His Gln  
100 105 110  
Pro Gly Asp Ile Phe Gly Cys Val Ala Asp Ile Gly Trp Ile Thr Gly  
115 120 125  
His Ser Tyr Val Val Tyr Gly Pro Leu Cys Asn Gly Ala Thr Ser Val  
130 135 140  
Leu Phe Glu Ser Thr Pro Val Tyr Pro Asn Ala Gly Arg Tyr Trp Glu  
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<212> DNA  
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&lt;210&gt; 2722

&lt;211&gt; 508

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2722

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 85 90 95  
 Leu Tyr Ser Ser Ser Ser Val Pro Thr Thr Ile Asn Thr Ile Gly Thr  
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 Ser Thr Ser Thr Asn Val Pro Ala Trp Leu Lys Ser Leu Arg Leu His  
 115 120 125  
 Lys Tyr Ala Ala Leu Phe Ser Gln Met Thr Tyr Glu Glu Met Met Ala  
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 Leu Thr Glu Cys Gln Leu Glu Ala Gln Asn Val Thr Lys Gly Ala Arg  
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 His Lys Ile Val Ile Ser Ile Gln Lys Leu Lys Glu Arg Gln Asn Leu

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Asn	Pro	Arg	Gln	Tyr	Gln	Ile	Pro	Ser	Arg	Asn	Val	Pro	Ser	Ala	Arg
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Leu	Gly	Leu	Leu	Gly	Thr	Ser	Gly	Phe	Val	Ser	Ser	Asn	Gln	Arg	Asn
				405					410					415	
Thr	Thr	Ala	Thr	Pro	Thr	Ile	Met	Lys	Gln	Gly	Arg	Gln	Asn	Leu	Trp
			420					425					430		
Phe	Ala	Asn	Pro	Gly	Gly	Ser	Asn	Ser	Met	Pro	Ser	Arg	Thr	His	Ser
		435				440						445			
Ser	Val	Gln	Arg	Thr	Arg	Ser	Leu	Pro	Val	His	Thr	Ser	Pro	Gln	Asn
	450					455					460				
Met	Leu	Met	Phe	Gln	Gln	Pro	Glu	Phe	Gln	Leu	Pro	Val	Thr	Glu	Pro
465					470					475					480
Asp	Ile	Asn	Asn	Arg	Leu	Glu	Ser	Leu	Cys	Leu	Ser	Met	Thr	Glu	His
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Ala	Leu	Gly	Asp	Gly	Val	Asp	Arg	Thr	Ser	Thr	Ile				
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<210> 2723

<211> 1221

<212> DNA

<213> Homo sapiens

<400> 2723

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120

cccaacacat tctggagtgc tgctgaggat gggcttatcc gccagtatga ccttcgagag  
180  
aacagcaaac actcggaggt gctgattgac ctgacagagt actgtggcca gctgggtggag  
240  
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300  
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360  
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420  
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720  
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780  
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840  
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1080  
gcccacagca gcgcttgtga tgcattgggc cgcgacatca cagctgccct cttctctaaa  
1140  
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1221

<210> 2724  
<211> 404  
<212> PRT  
<213> Homo sapiens

<400> 2724  
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20 25 30  
Thr Ala Pro Met Trp Pro Asn Thr Phe Trp Ser Ala Ala Glu Asp Gly  
35 40 45  
Leu Ile Arg Gln Tyr Asp Leu Arg Glu Asn Ser Lys His Ser Glu Val  
50 55 60  
Leu Ile Asp Leu Thr Glu Tyr Cys Gly Gln Leu Val Glu Ala Lys Cys

65                                70                                75                                80  
Leu Thr Val Asn Pro Gln Asp Asn Asn Cys Leu Ala Val Gly Ala Ser  
                              85                                90                                95  
Gly Pro Phe Val Arg Leu Tyr Asp Ile Arg Met Ile His Asn His Arg  
                              100                                105                                110  
Lys Ser Met Lys Gln Ser Pro Ser Ala Gly Val His Thr Phe Cys Asp  
                              115                                120                                125  
Arg Gln Lys Pro Leu Pro Asp Gly Ala Ala Gln Tyr Tyr Val Ala Gly  
                              130                                135                                140  
His Leu Pro Val Lys Leu Pro Asp Tyr Asn Asn Arg Leu Arg Val Leu  
145                                150                                155                                160  
Val Ala Thr Tyr Val Thr Phe Ser Pro Asn Gly Thr Glu Leu Leu Val  
                              165                                170                                175  
Asn Met Gly Gly Glu Gln Val Tyr Leu Phe Asp Leu Thr Tyr Lys Gln  
                              180                                185                                190  
Arg Pro Tyr Thr Phe Leu Leu Pro Arg Lys Cys His Ser Ser Gly Glu  
                              195                                200                                205  
Val Gln Asn Gly Lys Met Ser Thr Asn Gly Val Ser Asn Gly Val Ser  
                              210                                215                                220  
Asn Gly Leu His Leu His Ser Asn Gly Phe Arg Leu Pro Glu Ser Arg  
225                                230                                235                                240  
Gly His Val Ser Pro Gln Val Glu Leu Pro Pro Tyr Leu Glu Arg Val  
                              245                                250                                255  
Lys Gln Gln Ala Asn Glu Ala Phe Ala Cys Gln Gln Trp Thr Gln Ala  
                              260                                265                                270  
Ile Gln Leu Tyr Ser Lys Ala Val Gln Arg Ala Pro His Asn Ala Met  
                              275                                280                                285  
Leu Tyr Gly Asn Arg Ala Ala Ala Tyr Met Lys Arg Lys Trp Asp Gly  
                              290                                295                                300  
Asp His Tyr Asp Ala Leu Arg Asp Cys Leu Lys Ala Ile Ser Leu Asn  
305                                310                                315                                320  
Pro Cys His Leu Lys Ala His Phe Arg Leu Ala Arg Cys Leu Phe Glu  
                              325                                330                                335  
Leu Lys Tyr Val Ala Glu Ala Leu Glu Cys Leu Asp Asp Phe Lys Gly  
                              340                                345                                350  
Lys Phe Pro Glu Gln Ala His Ser Ser Ala Cys Asp Ala Leu Gly Arg  
                              355                                360                                365  
Asp Ile Thr Ala Ala Leu Phe Ser Lys Asn Asp Gly Glu Glu Lys Lys  
                              370                                375                                380  
Gly Pro Gly Gly Gly Ala Pro Val Arg Leu Arg Ser Thr Ser Arg Lys  
385                                390                                395                                400  
Gly Cys Thr Arg

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<211> 856  
<212> DNA  
<213> Homo sapiens

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120

aaggttctta aagaagtcag ggtgcaggat gagaacaacg tttgttttga gtgtggcgcg  
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ttcaatcctc agtgggtcag tgtgacctac ggcattctgga tctgcctgga gtgctcgggg  
240  
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300  
aaggacattg agcttgagaa gatgaaagct ggtgggaatg ctaagtccg agagttcctg  
360  
gagtctcagg aggattacga tccttgctgg tccttgccagg agaagtacaa cagcagagcc  
420  
gcggccctct ttagggataa ggtggctcgt ctggccgaag gcagagagtg gtctctggag  
480  
tcattacctg cccagaactg gacccacct cagccagga cgctgccgtc catggtgcac  
540  
cggtagctgc tctcgtggg gccttagtac agtttccact gggctctgaa cttagtagat  
600  
tgggtttccc acagaattct ccccttcttt gctgttctga cagctctttt cccagaagtc  
660  
agtgggaaaa acagcttttt aaaattgcc aacaatata agcttttagt aaatttgac  
720  
acccatagag ctgtctcaga tagcgcacca ggtaagctcc gcacgccttc caggtgtgca  
780  
cacagccgtg tctgccgtgg cgctgtggga gttcacatct ccatctgctc accgggggtg  
840  
tgtctgccct tcacgc  
856

<210> 2726  
<211> 148  
<212> PRT  
<213> Homo sapiens

<400> 2726  
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Asp Glu Asn Asn Val Cys Phe Glu Cys Gly Ala Phe Asn Pro Gln Trp  
20 25 30  
Val Ser Val Thr Tyr Gly Ile Trp Ile Cys Leu Glu Cys Ser Gly Arg  
35 40 45  
His Arg Gly Leu Gly Val His Leu Ser Phe Val Arg Ser Val Thr Met  
50 55 60  
Asp Lys Trp Lys Asp Ile Glu Leu Glu Lys Met Lys Ala Gly Gly Asn  
65 70 75 80  
Ala Lys Phe Arg Glu Phe Leu Glu Ser Gln Glu Asp Tyr Asp Pro Cys  
85 90 95  
Trp Ser Leu Gln Glu Lys Tyr Asn Ser Arg Ala Ala Ala Leu Phe Arg  
100 105 110  
Asp Lys Val Val Ala Leu Ala Glu Gly Arg Glu Trp Ser Leu Glu Ser  
115 120 125  
Ser Pro Ala Gln Asn Trp Thr Pro Pro Gln Pro Arg Thr Leu Pro Ser  
130 135 140  
Met Val His Arg  
145



<210> 2727  
<211> 1119  
<212> DNA  
<213> Homo sapiens

<400> 2727  
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acaaaataat caagtacatg gcattaagtt aaatgtctct gcacatgaat ttccacctta  
120  
taaactctgg atattaaatt gtgctgtaaa tagatttgta tttttcttt tttgagtact  
180  
atgatagggt aaatggtatg actataaaaa ggatttggtt ctttttgtct cctggaatga  
240  
catgatgcct ttctagagaa agaaaaattg caggctacag gaaaatgata aaaactactg  
300  
gattcattta gactattcga tttaggaagg tacaaccact tctttaacat caagctaaaa  
360  
gtgggggaaa gtctcagtct cccaggtagg tctcctctca cactgtctct ggtggcaggc  
420  
gctgtttata catgcccgtc atcgtctctg ctgcactgta gatcatctgc cgacgggaca  
480  
tcccagtaaa tgccatgtgc caatcagtcg ggctgacatt cagttaaactc tttccagga  
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600  
tttgagcctg ctgtacaaat tccaaaggca ctgggtgtggc ttgtgtaa at gtttctagat  
660  
gaatgccatg gacaggatct tcaaccacca aacaaccaat gtcaaaccat ttgtcaggca  
720  
gcaattctgc aatgaagttt tctactgaca cagctgtctg tttttcatgg atcaccacag  
780  
ttcgacgcaa gctatctatc cgttctctgag caccttttaa tccagctgca tagccactg  
840  
gttggtggggc aatattggac tgtccagcct cccctacaac cacagctagg ccgaagacct  
900  
cctggaaggc atctcggaca gcagccactt tcacttcttt atttgaggtc actacaatat  
960  
ccagttcacc tccagatttg atataggag ccatgccagg gtccagcgtt gtaatcatgc  
1020  
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1080  
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<210> 2728  
<211> 221  
<212> PRT  
<213> Homo sapiens

<400> 2728  
Met Val Lys Ser Val Leu Asp Lys Thr Lys His Ser Val Glu Ser Met  
1 5 10 15  
Ile Thr Thr Leu Asp Pro Gly Met Ala Pro Tyr Ile Lys Ser Gly Gly

20 25 30  
Glu Leu Asp Ile Val Val Thr Ser Asn Lys Glu Val Lys Val Ala Ala  
35 40 45  
Val Arg Asp Ala Phe Gln Glu Val Phe Gly Leu Ala Val Val Val Gly  
50 55 60  
Glu Ala Gly Gln Ser Asn Ile Ala Pro Gln Pro Val Gly Tyr Ala Ala  
65 70 75 80  
Gly Leu Lys Gly Ala Gln Glu Arg Ile Asp Ser Leu Arg Arg Thr Gly  
85 90 95  
Val Ile His Glu Lys Gln Thr Ala Val Ser Val Glu Asn Phe Ile Ala  
100 105 110  
Glu Leu Leu Pro Asp Lys Trp Phe Asp Ile Gly Cys Leu Val Val Glu  
115 120 125  
Asp Pro Val His Gly Ile His Leu Glu Thr Phe Thr Gln Ala Thr Pro  
130 135 140  
Val Pro Leu Glu Phe Val Gln Gln Ala Gln Ser Leu Thr Pro Gln Asp  
145 150 155 160  
Tyr Asn Leu Arg Trp Ser Gly Leu Leu Val Thr Val Gly Glu Val Leu  
165 170 175  
Glu Lys Ser Leu Leu Asn Val Ser Arg Thr Asp Trp His Met Ala Phe  
180 185 190  
Thr Gly Met Ser Arg Arg Gln Met Ile Tyr Ser Ala Ala Arg Ala Ile  
195 200 205  
Ala Gly Met Tyr Lys Gln Arg Leu Pro Pro Arg Thr Val  
210 215 220

&lt;210&gt; 2729

&lt;211&gt; 393

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2729

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120  
agctgctctg ccacgagatc ttctgagaag cacgtgaatt ctgctgactc tccacctcc  
180  
agttcctctt cctcttccat actaagggcc tggcttgacc agtgtgcaga agacttccga  
240  
gagccccctc acttcccctg cttacagaaa ctgctggatt atctcacacg gatgatgccg  
300  
ggctctgacc cagaaagaag agcacaaaat cttcttgagc agtttcagaa gcaagaagtg  
360  
gaaactgaca atgggcttcc caacacgac tcc  
393

&lt;210&gt; 2730

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2730

Val Ser Cys Ser Ala Thr Arg Ser Ser Glu Lys His Val Asn Ser Ala

```

      1           5           10           15
Asp Ser Pro Pro Ser Ser Ser Ser Ser Ser Ile Leu Arg Ala Trp
      20           25           30
Leu Asp Gln Cys Ala Glu Asp Phe Arg Glu Pro Pro His Phe Pro Cys
      35           40           45
Leu Gln Lys Leu Leu Asp Tyr Leu Thr Arg Met Met Pro Gly Ser Asp
      50           55           60
Pro Glu Arg Arg Ala Gln Asn Leu Leu Glu Gln Phe Gln Lys Gln Glu
      65           70           75           80
Val Glu Thr Asp Asn Gly Leu Pro Asn Thr Ile Ser
      85           90

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<210> 2731  
 <211> 447  
 <212> DNA  
 <213> Homo sapiens

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<400> 2731
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120
atcgggtgtca cctgcgtgtt tcccatcgac ctggccaaga ccaggctgca gaaccagcag
180
aacggccagc gcgtgtacac gagcatgtcc gactgcctca tcaagaccgt ccgctccgag
240
ggctacttcg gcatgtaccg gggagctgct gtgaacttga cctcgtcac ccccgagaag
300
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360
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420
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447

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<210> 2732  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

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<400> 2732
Ala Asp Gln Pro Ala Ser Gln Ala His Gln Trp Arg His Arg Gly Leu
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Ile Gly Val Thr Cys Val Phe Pro Ile Asp Leu Ala Lys Thr Arg Leu
20           25           30
Gln Asn Gln Gln Asn Gly Gln Arg Val Tyr Thr Ser Met Ser Asp Cys
35           40           45
Leu Ile Lys Thr Val Arg Ser Glu Gly Tyr Phe Gly Met Tyr Arg Gly
50           55           60
Ala Ala Val Asn Leu Thr Leu Val Thr Pro Glu Lys Ala Ile Lys Leu
65           70           75           80
Ala Ala Asn Asp Phe Phe Arg His Gln Leu Ser Lys Asp Gly Gln Lys
85           90           95
Leu Thr Leu Leu Lys Glu Met Leu Ala Gly Cys Gly Ala Gly Thr Cys

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100 105 110  
Gln Val Ile Val Thr Thr Pro Met Glu Met Leu Lys Ile  
115 120 125

<210> 2733  
<211> 3619  
<212> DNA  
<213> Homo sapiens

<400> 2733  
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120  
ccccagcacc catgtcacc ccaacagctg gactgcccg c tggccatgga gcggatcaag  
180  
gaggaccggc ccatcaccat caaggacgac aagggaacc tcaaccgctg catcgagac  
240  
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1140  
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1200  
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1260  
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1320

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1380  
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1440  
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1920  
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1980  
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2160  
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2220  
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2280  
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2340  
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2580  
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2640  
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2880  
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 3240  
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 3360  
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 3420  
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 3480  
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 3540  
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 3600  
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<210> 2734

<211> 790

<212> PRT

<213> Homo sapiens

<400> 2734

Met	Glu	Arg	Ile	Lys	Glu	Asp	Arg	Pro	Ile	Thr	Ile	Lys	Asp	Asp	Lys
1				5					10					15	
Gly	Asn	Leu	Asn	Arg	Cys	Ile	Ala	Asp	Val	Val	Ser	Leu	Phe	Ile	Thr
			20					25					30		
Val	Met	Asp	Lys	Leu	Arg	Leu	Ala	Glu	Leu	Thr	Val	Asp	Glu	Phe	Leu
		35					40					45			
Ala	Ser	Gly	Phe	Asp	Ser	Glu	Ser	Glu	Ser	Glu	Ser	Glu	Asn	Ser	Pro
		50				55					60				
Gln	Ala	Glu	Thr	Arg	Glu	Ala	Arg	Glu	Ala	Ala	Arg	Ser	Pro	Asp	Lys
65					70				75					80	
Pro	Gly	Gly	Ser	Pro	Ser	Ala	Ser	Arg	Arg	Lys	Gly	Arg	Ala	Ser	Glu
			85						90					95	
His	Lys	Asp	Gln	Leu	Ser	Arg	Leu	Lys	Asp	Arg	Asp	Pro	Glu	Phe	Tyr
			100					105					110		
Lys	Phe	Leu	Gln	Glu	Asn	Asp	Gln	Ser	Leu	Leu	Asn	Phe	Ser	Asp	Ser
		115					120					125			
Asp	Ser	Ser	Glu	Glu	Glu	Glu	Gly	Pro	Phe	His	Ser	Leu	Pro	Asp	Val
		130				135					140				
Leu	Glu	Glu	Ala	Ser	Glu	Glu	Glu	Asp	Gly	Ala	Glu	Glu	Gly	Glu	Asp
145					150					155				160	
Gly	Asp	Arg	Val	Pro	Arg	Gly	Leu	Lys	Gly	Lys	Lys	Asn	Ser	Val	Pro
			165						170					175	
Val	Thr	Val	Ala	Met	Val	Glu	Arg	Trp	Lys	Gln	Ala	Ala	Lys	Gln	Arg

			180					185					190			
Leu	Thr	Pro	Lys	Leu	Phe	His	Glu	Val	Val	Gln	Ala	Phe	Arg	Ala	Ala	
		195					200					205				
Val	Ala	Thr	Thr	Arg	Gly	Asp	Gln	Glu	Ser	Ala	Glu	Ala	Asn	Lys	Phe	
	210					215					220					
Gln	Val	Thr	Asp	Ser	Ala	Ala	Phe	Asn	Ala	Leu	Val	Thr	Phe	Cys	Ile	
225					230					235				240		
Arg	Asp	Leu	Ile	Gly	Cys	Leu	Gln	Lys	Leu	Leu	Phe	Gly	Lys	Val	Ala	
			245					250						255		
Lys	Asp	Ser	Ser	Arg	Met	Leu	Gln	Pro	Ser	Ser	Ser	Pro	Leu	Trp	Gly	
		260						265					270			
Lys	Leu	Arg	Val	Asp	Ile	Lys	Ala	Tyr	Leu	Gly	Ser	Ala	Ile	Gln	Leu	
	275						280					285				
Val	Ser	Cys	Leu	Ser	Glu	Thr	Thr	Val	Leu	Ala	Ala	Val	Leu	Arg	His	
	290					295					300					
Ile	Ser	Val	Leu	Val	Pro	Cys	Phe	Leu	Thr	Phe	Pro	Lys	Gln	Cys	Arg	
305					310					315					320	
Met	Leu	Leu	Lys	Arg	Met	Val	Val	Val	Trp	Ser	Thr	Gly	Glu	Glu	Ser	
			325						330					335		
Leu	Arg	Val	Leu	Ala	Phe	Leu	Val	Leu	Ser	Arg	Val	Cys	Arg	His	Lys	
		340						345					350			
Lys	Asp	Thr	Phe	Leu	Gly	Pro	Val	Leu	Lys	Gln	Met	Tyr	Ile	Thr	Tyr	
	355					360					365					
Val	Arg	Asn	Cys	Lys	Phe	Thr	Ser	Pro	Gly	Ala	Leu	Pro	Phe	Ile	Ser	
	370					375					380					
Phe	Met	Gln	Trp	Thr	Leu	Thr	Glu	Leu	Leu	Ala	Leu	Glu	Pro	Gly	Val	
385					390					395					400	
Ala	Tyr	Gln	His	Ala	Phe	Leu	Tyr	Ile	Arg	Gln	Leu	Ala	Ile	His	Leu	
			405						410					415		
Arg	Asn	Ala	Met	Thr	Thr	Arg	Lys	Lys	Glu	Thr	Tyr	Gln	Ser	Val	Tyr	
		420						425					430			
Asn	Trp	Gln	Tyr	Val	His	Cys	Leu	Phe	Leu	Trp	Cys	Arg	Val	Leu	Ser	
	435					440					445					
Thr	Ala	Gly	Pro	Ser	Glu	Ala	Leu	Gln	Pro	Leu	Val	Tyr	Pro	Leu	Ala	
	450				455					460						
Gln	Val	Ile	Ile	Gly	Cys	Ile	Lys	Leu	Ile	Pro	Thr	Ala	Arg	Phe	Tyr	
465				470						475					480	
Pro	Leu	Arg	Met	His	Cys	Ile	Arg	Ala	Leu	Thr	Leu	Leu	Ser	Gly	Ser	
			485					490						495		
Ser	Gly	Ala	Phe	Ile	Pro	Val	Leu	Pro	Phe	Ile	Leu	Glu	Met	Phe	Gln	
		500						505					510			
Gln	Val	Asp	Phe	Asn	Arg	Lys	Pro	Gly	Arg	Met	Ser	Ser	Lys	Pro	Ile	
	515					520										

610                      615                      620  
 Glu Gln Gln Ala Val Glu Ala Trp Glu Lys Leu Thr Arg Glu Glu Gly  
 625                      630                      635                      640  
 Thr Pro Leu Thr Leu Tyr Tyr Ser His Trp Arg Lys Leu Arg Asp Arg  
                     645                      650                      655  
 Glu Ile Gln Leu Glu Ile Ser Gly Lys Glu Arg Val Arg Leu Gly Glu  
                     660                      665                      670  
 Gly Thr Trp Leu Glu Asp Leu Asn Phe Pro Glu Ile Lys Arg Arg Lys  
                     675                      680                      685  
 Met Ala Asp Arg Lys Asp Glu Asp Arg Lys Gln Phe Lys Asp Leu Phe  
                     690                      695                      700  
 Asp Leu Asn Ser Ser Glu Glu Asp Asp Thr Glu Gly Phe Leu Glu Arg  
 705                      710                      715                      720  
 Gly Ile Leu Gly Pro Leu Ser Thr Arg His Gly Val Glu Asp Asp Glu  
                     725                      730                      735  
 Glu Asp Glu Glu Glu Gly Glu Glu Asp Ser Ser Asn Ser Glu Gly Glu  
                     740                      745                      750  
 Trp Ser Trp Asp Gly Asp Pro Asp Ala Glu Ala Gly Leu Ala Pro Gly  
                     755                      760                      765  
 Glu Leu Gln Gln Leu Ala Gln Gly Pro Glu Asp Glu Leu Glu Asp Leu  
                     770                      775                      780  
 Gln Leu Ser Glu Asp Asp  
 785                      790

&lt;210&gt; 2735

&lt;211&gt; 1666

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2735

nccccgggcg ggcgcggggcc gcgatggcag cggcggagca gggctgagcc cgctgcccgc  
 60  
 ccgcagttcc cggccccgct ggccccagtc atggcgaagc agtacgatgt gctgttcg  
 120  
 ctgctgctga tcggggactc cgggggtgggc aagacctgcc tgctgtgccg cttcaccgac  
 180  
 aacgagttcc actcctcgca catctccacc atcgggtgttg actttaagat gaagaccata  
 240  
 gaggtagacg gcatcaaagt gcggatacag atctgggaca ctgcagggca ggagagatac  
 300  
 cagaccatca caaagcagta ctatcggcgg gcccgaggga tatttttggg ctatgacatt  
 360  
 agcagcgagc gctcttacca gcacatcatg aagtgggtca gtgacgtgga tgagtacgca  
 420  
 ccagaaggcg tccagaagat ccttattggg aataaggctg atgaggagca gaaacggcag  
 480  
 gtgggaagag agcaagggca gcagaaatgt ccttctcttc agctggcgaa ggagtatggc  
 540  
 atggacttct atgaaacaag tgccctgcacc aacctcaaca ttaaagagtc attcacgcgt  
 600  
 ctgacagagc tgggtgctgca ggcccatagg aaggagctgg aaggcctccg gatgcgtgcc  
 660  
 agcaatgagt tggcactggc agagctggag gaggaggagg gcaaaccgga gggcccagcg  
 720



aactcttcga aaacctgctg gtgctgagtc ctgtgtgggg caccacacac gacacccctc  
780  
ttccctcagg agggccgtgg gcagacaggg gagccggggc ttgcccctgc tgctgtcctc  
840  
tcgtgtgatg accctattga gtatcagtag ccactactcc ccctgcctgg ccctgagagc  
900  
ggctctgctg tcattctcaag cagccctgt cccagcccg tccaccctgg agtggctctc  
960  
ttcagcctgt tccccagcc acaggcctgc tacgaccccc acgatgtgcc gcaagcactg  
1020  
tctcaccatc ccgcacccac cagacaacag ccagggtgg agtccaggcc actttcagct  
1080  
gtcctttct cctgcatcg tgtctcttct ctgcttttct tctcttcccc cacttctctt  
1140  
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1200  
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1260  
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1320  
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1380  
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1440  
gcaaccaggg agtctctgag cctggggctg ccctacctct acccattccc cgaccagagc  
1500  
tttgcccttg cttggctgcc cgcctgcctc ttgggggaac tgagctcgga ggcagggtgt  
1560  
tcagagaagg aaacaaaatg aggggtggca gggataaaaa gtcacctcca ttctctacct  
1620  
cccatgcagc atgaacacaa tttctctcca cctggctccc aaattt  
1666

&lt;210&gt; 2736

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2736

Met	Ala	Lys	Gln	Tyr	Asp	Val	Leu	Phe	Arg	Leu	Leu	Leu	Ile	Gly	Asp
1				5					10					15	
Ser	Gly	Val	Gly	Lys	Thr	Cys	Leu	Leu	Cys	Arg	Phe	Thr	Asp	Asn	Glu
			20						25				30		
Phe	His	Ser	Ser	His	Ile	Ser	Thr	Ile	Gly	Val	Asp	Phe	Lys	Met	Lys
			35					40				45			
Thr	Ile	Glu	Val	Asp	Gly	Ile	Lys	Val	Arg	Ile	Gln	Ile	Trp	Asp	Thr
			50				55				60				
Ala	Gly	Gln	Glu	Arg	Tyr	Gln	Thr	Ile	Thr	Lys	Gln	Tyr	Tyr	Arg	Arg
65					70					75				80	
Ala	Gln	Gly	Ile	Phe	Leu	Val	Tyr	Asp	Ile	Ser	Ser	Glu	Arg	Ser	Tyr
				85					90					95	
Gln	His	Ile	Met	Lys	Trp	Val	Ser	Asp	Val	Asp	Glu	Tyr	Ala	Pro	Glu
			100						105				110		
Gly	Val	Gln	Lys	Ile	Leu	Ile	Gly	Asn	Lys	Ala	Asp	Glu	Glu	Gln	Lys

115 120 125  
Arg Gln Val Gly Arg Glu Gln Gly Gln Lys Cys Pro Ser Leu Gln  
130 135 140  
Leu Ala Lys Glu Tyr Gly Met Asp Phe Tyr Glu Thr Ser Ala Cys Thr  
145 150 155 160  
Asn Leu Asn Ile Lys Glu Ser Phe Thr Arg Leu Thr Glu Leu Val Leu  
165 170 175  
Gln Ala His Arg Lys Glu Leu Glu Gly Leu Arg Met Arg Ala Ser Asn  
180 185 190  
Glu Leu Ala Leu Ala Glu Leu Glu Glu Glu Glu Gly Lys Pro Glu Gly  
195 200 205  
Pro Ala Asn Ser Ser Lys Thr Cys Trp Cys  
210 215

&lt;210&gt; 2737

&lt;211&gt; 898

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2737.

nnaccggtat ggcggcactg cgccggggttt ggccggccgat gtcaccggca ccgcatccgc  
60  
cgagcggagg agcacgctga ggagctgcgg aacaagattg tggaccagtg tgagaggctg  
120  
cagttacaga gtgctgccat caccaagtat gtggcggacg tcctgccggg gaagaatcaa  
180  
agagcagtga gcatggccag tgcagcagg gaactgggta tccagcgggt gagtctggtg  
240  
aggagtcttt gcgagagcga ggagcagcgg ttactggaac aggtgcatgg cgaagaggag  
300  
cgggcccacc agagcaccct gacacagcgg gtgcactggg ccgaggcgct gcagaaactt  
360  
gacaccatcc gactggcct ggtgggcatg cttactcacc tggatgacct ccagctgatt  
420  
cagaaggagc aagagatttt cgagaggacc gaagaagcag agggcatttt ggatccccag  
480  
gagtcggaaa tgttaaactt taatgagaag tgcactcgga gccactact gacccaactc  
540  
tgggcaacgg cggttcttgg gtctctctca ggcacagagg acatacggat cgatgagagg  
600  
acagtcagcc ccttctgca attgtcagat gatcgaaaga cctgacctc agcaccaaga  
660  
agtcaaagggt gtgcagatgg cccggagcgc ttcgaccact ggcccaatgc cctggctgcc  
720  
acctccttcc agaattgggt ccatgcctgg atgggtgaatg tccagaacag ttgtgcctat  
780  
aagggtggcg tggcttcagg ccacctgccc cgcaagggtt ctggcagtga ctgccgtctg  
840  
ggccacaatg ccttctctg ggtcttctct cgtatgatc aggagtttcg tttctcac  
898

&lt;210&gt; 2738

&lt;211&gt; 299

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2738

Xaa Pro Val Cys Ala Thr Cys Ala Gly Phe Gly Gly Arg Cys His Arg  
 1 5 10 15  
 His Arg Ile Arg Arg Ala Glu Glu His Ala Glu Glu Leu Arg Asn Lys  
 20 25 30  
 Ile Val Asp Gln Cys Glu Arg Leu Gln Leu Gln Ser Ala Ala Ile Thr  
 35 40 45  
 Lys Tyr Val Ala Asp Val Leu Pro Gly Lys Asn Gln Arg Ala Val Ser  
 50 55 60  
 Met Ala Ser Ala Ala Arg Glu Leu Val Ile Gln Arg Leu Ser Leu Val  
 65 70 75 80  
 Arg Ser Leu Cys Glu Ser Glu Glu Gln Arg Leu Leu Glu Gln Val His  
 85 90 95  
 Gly Glu Glu Glu Arg Ala His Gln Ser Ile Leu Thr Gln Arg Val His  
 100 105 110  
 Trp Ala Glu Ala Leu Gln Lys Leu Asp Thr Ile Arg Thr Gly Leu Val  
 115 120 125  
 Gly Met Leu Thr His Leu Asp Asp Leu Gln Leu Ile Gln Lys Glu Gln  
 130 135 140  
 Glu Ile Phe Glu Arg Thr Glu Glu Ala Glu Gly Ile Leu Asp Pro Gln  
 145 150 155 160  
 Glu Ser Glu Met Leu Asn Phe Asn Glu Lys Cys Thr Arg Ser Pro Leu  
 165 170 175  
 Leu Thr Gln Leu Trp Ala Thr Ala Val Leu Gly Ser Leu Ser Gly Thr  
 180 185 190  
 Glu Asp Ile Arg Ile Asp Glu Arg Thr Val Ser Pro Phe Leu Gln Leu  
 195 200 205  
 Ser Asp Asp Arg Lys Thr Leu Thr Ser Ala Pro Arg Ser Gln Arg Cys  
 210 215 220  
 Ala Asp Gly Pro Glu Arg Phe Asp His Trp Pro Asn Ala Leu Ala Ala  
 225 230 235 240  
 Thr Ser Phe Gln Asn Gly Leu His Ala Trp Met Val Asn Val Gln Asn  
 245 250 255  
 Ser Cys Ala Tyr Lys Val Gly Val Ala Ser Gly His Leu Pro Arg Lys  
 260 265 270  
 Gly Ser Gly Ser Asp Cys Arg Leu Gly His Asn Ala Phe Ser Trp Val  
 275 280 285  
 Phe Ser Arg Tyr Asp Gln Glu Phe Arg Phe Ser  
 290 295

&lt;210&gt; 2739

&lt;211&gt; 1501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2739

gagagccgcc gagagtgggg ggcgatggcg aagctccggg tggcttacga gtacacggaa  
 60  
 gccgaggaca agagcatccg gctcggcttg tttctcatca tctccggcgt cgtgtcgtc  
 120  
 ttcattctcg gcttctgctg gctgagtcgc gcgctgcagg atctgcaagc cacggaggcc  
 180

aattgcacgg tgctgtcggg gcagcagatc ggcgaggtgt tcgagtgcac cttcacctgt  
240  
ggcgccgact gcaggggcac ctgcagtagc ccctgcgtcc aggtctacgt gaacaactct  
300  
gagtccaact ctagggcgct gctgcacagc gacgagcacc agctcctgac caacccaag  
360  
tgctcctata tccctccctg taagagagaa aatcagaaga atttggaaag tgtcatgaat  
420  
tggcaacagt actggaaaga tgagattggg tcccagccat ttacttgcta ttttaataca  
480  
catcaaagac cagatgatgt gcttctgcat cgcactcatg atgagattgt cctcctgcat  
540  
tgcttcctct ggcccttggg gacatttggg gtgggcgttc tcattgtggg cctgaccatc  
600  
tgtgccaaga gcttggcggt caaggcggaa gccatgaaga agcgcaagtt ctcttaaagg  
660  
ggaaggaggc ttgtagaaag caaagtacag aagctgtact catcggcacg cgtccacctg  
720  
cggaacctgt gtttcctggc gcaggagatg gacagggcca cgacagggtc ctgagagggt  
780  
catccctcag tggcaacaga aacaggcaca actggaagac ttggaacctc aaagcttgta  
840  
ttccatctgc tgtagcaatg gctaaagggt caagatctta gctgtatgga gtaactatct  
900  
cagaaaacc tataagaagt tcattttctt tcaaaagtaa cagtatatta tttgtacagt  
960  
gtagtataca aaccattatg atttatgcta cttaaaaata ttaaaataga gtggctctgtg  
1020  
ttattttcta tttccttttt tatgcttaga acaccagggt tttaaaaaaa aaaaaagggtg  
1080  
aggacatctg ggtctcattt gcttctgcta gggttaaactt ttacttgaca acaaggattc  
1140  
ctgctgaagt ctgaacctta ctgtgtaacc ctcagtttcc actattaaag agtatctttt  
1200  
gacgtcctgc ttggaaaatg aatagtatac tggtaactca gtctccagtc acctctgtgt  
1260  
ctcttaagca agagattcta aaagattggg aaaacatata ctccaaaacc tgcctttgcc  
1320  
taaccattat ttttcaccag attacttctt aagagagggg ggtgattctg aagaaggctt  
1380  
ctatctcaaa aagcactggg cttccttatt catctgttct tgttggtttt gacggagtta  
1440  
aaaaagtttg tgtgcaatac aatataaatg atgtgaagga cactcttaa aaaaaaaaaa  
1500  
a  
1501

&lt;210&gt; 2740

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2740

Glu Ser Arg Arg Glu Trp Gly Ala Met Ala Lys Leu Arg Val Ala Tyr

```

      1           5           10           15
Glu Tyr Thr Glu Ala Glu Asp Lys Ser Ile Arg Leu Gly Leu Phe Leu
      20           25           30
Ile Ile Ser Gly Val Val Ser Leu Phe Ile Phe Gly Phe Cys Trp Leu
      35           40           45
Ser Pro Ala Leu Gln Asp Leu Gln Ala Thr Glu Ala Asn Cys Thr Val
      50           55           60
Leu Ser Val Gln Gln Ile Gly Glu Val Phe Glu Cys Thr Phe Thr Cys
      65           70           75           80
Gly Ala Asp Cys Arg Gly Thr Ser Gln Tyr Pro Cys Val Gln Val Tyr
      85           90           95
Val Asn Asn Ser Glu Ser Asn Ser Arg Ala Leu Leu His Ser Asp Glu
      100          105          110
His Gln Leu Leu Thr Asn Pro Lys Cys Ser Tyr Ile Pro Pro Cys Lys
      115          120          125
Arg Glu Asn Gln Lys Asn Leu Glu Ser Val Met Asn Trp Gln Gln Tyr
      130          135          140
Trp Lys Asp Glu Ile Gly Ser Gln Pro Phe Thr Cys Tyr Phe Asn Gln
      145          150          155          160
His Gln Arg Pro Asp Asp Val Leu Leu His Arg Thr His Asp Glu Ile
      165          170          175
Val Leu Leu His Cys Phe Leu Trp Pro Leu Val Thr Phe Val Val Gly
      180          185          190
Val Leu Ile Val Val Leu Thr Ile Cys Ala Lys Ser Leu Ala Val Lys
      195          200          205
Ala Glu Ala Met Lys Lys Arg Lys Phe Ser
      210          215

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&lt;210&gt; 2741

&lt;211&gt; 1487

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2741

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aaggctcgag ggaaagtgag tgagatcatc aacaatgcca ttgtgcacta ccgagatgac
60
ttggatctgc agaacctcat tgattttggc cagaaaaagt ttagctgctg tggagggatt
120
tcctacaagg actggtctca gaacatgtat ttcaactgct cagaagacaa cccagtcga
180
gagcgctgct ctgtgcctta ctctgttgc ttgcctactc ctgaccagge agtgatcaac
240
actatgtgtg gccaaggatg gcaggccttt gactacttgg aagctagcaa agtcatctac
300
accaatggct gtattgacaa gttggtcaac tggatacaca gcaacctatt cttacttggg
360
ggtgtggctc taggcctggc catccccag ctggtgggaa ttctgctgtc ccagatccta
420
gtgaatcaga tcaaagatca gatcaagcta cagctctaca accagcagca ccgggctgac
480
ccatggtact gagaatccat cctgcacctc ctcacatgg aaactggcaa gcctcataaa
540
cgaacagcag tgggtgctga aagcagcacc aaatggagat ttggattcca gccccccagt
600

```

gacagcccag tgggaagaag caaactccag atgggcagaa ggcaggggtgc acaggtggct  
660  
ccagtctcag gaggatgcgc ctctctccc ccatcccagc cctcagcatt gtgccagagt  
720  
gataccctta agtgtttggg tttatgtttt cagttttgtt tgggaaacag cagttgcaca  
780  
gagagttggg ggtactgctg ctgccttttc accgaggcac tgccaccacc agctctagca  
840  
gggatgctcc tgagcttggc ggacatactt agatcctaac gtgccagtga gacctggctg  
900  
tggagagtag cactggcagc cctgcctgga ctccacttgg catgatacca gctccagaag  
960  
ggaagggagt ggagcaggca gtgaggagag agcctggggg tcggctgggg acagccgtat  
1020  
gtgctaggta ggagtggagg gagatatgtt taccaaatgc ctgtcctgcc atcctcccag  
1080  
gtagtacagag tgagctacat cctgccccgc cttcatttcc atggaaacat ggcagctagg  
1140  
acacggggta tacaacagca gccaaattct tccccacctc ccttacttcg aaaaaaagtt  
1200  
tggaaccctg gtccctatac tctgcagtca gaagtgggac tgagccatac atgcccttga  
1260  
attcctccct gtctggccct ccctctccag caagcagggg tttctttaac ttggcagtgt  
1320  
gcagaggaga agtggaaca cccccaccc attccctgc atcgagctc agtattccta  
1380  
cagggtgaaga ggtaggaatc ttgctgggac gaggggagcc agaagtggca ataaaagcgt  
1440  
gttgacctgg gcaaaaaaaaa aaaaaaaaaa aaagaaaaaa aaaaaaa  
1487

&lt;210&gt; 2742

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2742

Lys	Ala	Arg	Gly	Lys	Val	Ser	Glu	Ile	Ile	Asn	Asn	Ala	Ile	Val	His
1				5					10					15	
Tyr	Arg	Asp	Asp	Leu	Asp	Leu	Gln	Asn	Leu	Ile	Asp	Phe	Gly	Gln	Lys
			20					25					30		
Lys	Phe	Ser	Cys	Cys	Gly	Gly	Ile	Ser	Tyr	Lys	Asp	Trp	Ser	Gln	Asn
			35				40					45			
Met	Tyr	Phe	Asn	Cys	Ser	Glu	Asp	Asn	Pro	Ser	Arg	Glu	Arg	Cys	Ser
			50				55				60				
Val	Pro	Tyr	Ser	Cys	Cys	Leu	Pro	Thr	Pro	Asp	Gln	Ala	Val	Ile	Asn
65					70					75				80	
Thr	Met	Cys	Gly	Gln	Gly	Met	Gln	Ala	Phe	Asp	Tyr	Leu	Glu	Ala	Ser
				85				90						95	
Lys	Val	Ile	Tyr	Thr	Asn	Gly	Cys	Ile	Asp	Lys	Leu	Val	Asn	Trp	Ile
			100				105						110		
His	Ser	Asn	Leu	Phe	Leu	Leu	Gly	Gly	Val	Ala	Leu	Gly	Leu	Ala	Ile
		115					120					125			
Pro	Gln	Leu	Val	Gly	Ile	Leu	Leu	Ser	Gln	Ile	Leu	Val	Asn	Gln	Ile

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Pro Trp Tyr

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<211> 384  
<212> DNA  
<213> Homo sapiens

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<210> 2744  
<211> 69  
<212> PRT  
<213> Homo sapiens

<400> 2744  
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35 40 45  
Gln Ser Pro Pro Gly Ala Ser Arg Asp Trp Ser Val Pro Ser Pro Pro  
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Arg Ala Tyr Gln Asp  
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<210> 2745  
<211> 769  
<212> DNA  
<213> Homo sapiens

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<210> 2746  
<211> 98  
<212> PRT  
<213> Homo sapiens

<400> 2746  
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Ser Gly Glu Lys Leu Pro Asp Gln Pro Phe Thr His His Ser Gln Glu  
35 40 45  
Gly Pro Phe Pro Pro Gly Arg Glu Thr Ser Arg Pro Ala Pro His Thr  
50 55 60  
Thr Ala Lys Arg Gly Leu Ser His Leu Glu Arg Asn Phe Gln Thr Ser  
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Pro Ser His His Ser Gln Glu Gly Pro Phe Pro Pro Gly Glu Lys Leu  
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Pro Asp

<210> 2747  
<211> 1100  
<212> DNA  
<213> Homo sapiens

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120



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&lt;210&gt; 2748

&lt;211&gt; 205

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2748

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 Trp Thr Gly Ala Phe Trp Ile Pro Arg Pro Pro Ala Gly Ser Pro Lys  
 35 40 45  
 Gly Cys Phe Ala Cys Val Ser Lys Pro Pro Ala Leu Gln Ala Pro Ala  
 50 55 60  
 Ala Pro Ala Pro Glu Pro Ser Ala Ser Pro Pro Met Ala Pro Thr Leu  
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 Phe Pro Met Glu Ser Lys Ser Ser Lys Thr Asp Ser Val Arg Ala Ala  
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 Gly Ala Pro Pro Ala Cys Lys His Leu Ala Glu Lys Lys Thr Met Thr

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      100      105      110
Asn Pro Thr Thr Val Ile Glu Val Tyr Pro Asp Thr Thr Glu Val Asn
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      130      135      140
Cys Leu Gly Phe Ile Ala Leu Ala Tyr Ser Leu Lys Val Arg Asp Lys
145      150      155      160
Lys Leu Leu Asn Asp Leu Asn Gly Ala Val Glu Asp Ala Lys Thr Ala
      165      170      175
Arg Leu Phe Asn Ile Thr Ser Ser Ala Leu Ala Ala Ser Cys Ile Ile
      180      185      190
Leu Val Phe Ile Phe Leu Arg Tyr Pro Leu Thr Asp Tyr
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&lt;210&gt; 2749

&lt;211&gt; 2050

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2749

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&lt;210&gt; 2750

&lt;211&gt; 332

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2750

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Ile	Cys	Thr	Arg	Thr	Val	Gln	His	Gln	Asp	Ser	Gln	Val	Asn	Ala	Leu
		35				40					45				
Glu	Val	Thr	Pro	Asp	Arg	Ser	Met	Ile	Ala	Ala	Ala	Val	Gln	Pro	Val
	50					55					60				
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Pro	Asn	Pro	Ile	Ile	Ser	Tyr	Asp	Gly	Val	Asn	Lys	Asn	Ile	Ala	Ser

														85			90			95		
Val	Gly	Phe	His	Glu	Asp	Gly	Arg	Trp	Met	Tyr	Thr	Gly	Gly	Glu	Asp							
			100			105						110										
Cys	Thr	Ala	Arg	Ile	Trp	Asp	Leu	Arg	Ser	Arg	Asn	Leu	Gln	Cys	Gln							
			115			120						125										
Arg	Ile	Phe	Gln	Val	Asn	Ala	Pro	Ile	Asn	Cys	Val	Cys	Leu	His	Pro							
			130			135						140										
Asn	Gln	Ala	Glu	Leu	Ile	Val	Gly	Asp	Gln	Ser	Gly	Ala	Ile	His	Ile							
			145			150						155			160							
Trp	Asp	Leu	Lys	Thr	Asp	His	Asn	Glu	Gln	Leu	Ile	Pro	Glu	Pro	Glu							
			165			170						175										
Val	Ser	Ile	Thr	Ser	Ala	His	Ile	Asp	Pro	Asp	Ala	Ser	Tyr	Met	Ala							
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Ala	Val	Asn	Ser	Thr	Gly	Asn	Cys	Tyr	Val	Trp	Asn	Leu	Thr	Gly	Gly							
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His	Thr	Arg	Tyr	Ala	Leu	Gln	Cys	Arg	Phe	Ser	Pro	Asp	Ser	Thr	Leu							
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			260			265						270										
Glu	Ser	Ser	Arg	Gly	Trp	Met	Trp	Gly	Cys	Ala	Phe	Ser	Gly	Asp	Ser							
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Gln	Tyr	Ile	Val	Thr	Ala	Ser	Ser	Asp	Asn	Leu	Ala	Arg	Leu	Trp	Cys							
			290			295						300										
Val	Glu	Thr	Gly	Glu	Ile	Lys	Arg	Glu	Tyr	Gly	Gly	His	Gln	Lys	Ala							
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<210> 2751

<211> 1877

<212> DNA

<213> Homo sapiens

<400> 2751

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&lt;210&gt; 2752

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2752

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 35 40 45  
 Pro Pro Pro Thr Thr Arg Thr Val Ala Ser Ser Gly Thr His Thr Ser  
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 Gly Leu Ser Pro Thr Ala Ser Arg Pro Ala Arg Cys Arg Ala Pro Gly  
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 Arg Ser Ser Thr Ile Ile Thr  
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&lt;210&gt; 2753

&lt;211&gt; 2561

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2753

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&lt;210&gt; 2754

&lt;211&gt; 731

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2754

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&lt;210&gt; 2755

&lt;211&gt; 4795

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2755

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&lt;210&gt; 2756

&lt;211&gt; 550

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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Ala Lys Glu Asn Leu Lys Lys Ile Gln Glu Met Glu Lys Ser Asp Glu  
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Trp Val Gln Val Met Arg Asp Leu Arg Asn Gly Val Lys Leu Lys Lys  
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Val Gln Glu Arg Gln Tyr Asn Pro Leu Pro Ile Glu Tyr Gln Leu Thr  
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Pro Tyr Glu Met Leu Met Asp Asp Ile Arg Cys Lys Arg Tyr Thr Leu  
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Arg Lys Val Met Val Asn Gly Asp Ile Pro Pro Arg Leu Lys Lys Ser  
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Ala His Glu Ile Ile Leu Asp Phe Ile Arg Ser Arg Pro Pro Leu Asn  
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Pro Val Ser Pro Glu Glu Ile Arg Arg Ser Arg Leu Asp Val Thr Thr  
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Pro Glu Ser Thr Lys Asn Leu Val Glu Ser Ser Met Val Asn Gly Gly  
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225 230 235 240  
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245 250 255  
Asp Ser Ser Glu Ser Glu Glu Glu Thr Leu His Lys Ser Thr Ser Ser  
260 265 270  
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275 280 285  
Ser Thr Arg Lys Lys Pro Pro Lys Phe Leu Pro Ile Ser Ser Thr Pro  
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Gln Pro Glu Arg Arg Gln Pro Pro Gln Arg Arg His Ser Ile Glu Lys  
305 310 315 320  
Glu Thr Pro Thr Asn Val Arg Gln Phe Leu Pro Pro Ser Arg Gln Ser  
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340 345 350  
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Gly Lys Leu Cys Phe Cys Cys Arg Thr Arg Arg Phe Ser Phe Phe Thr  
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Trp Ser Tyr Thr Cys Gln Phe Cys Lys Arg Pro Val Cys Ser Gln Cys  
405 410 415  
Cys Lys Lys Met Arg Leu Pro Ser Lys Pro Tyr Ser Thr Leu Pro Ile

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 Gln Phe Pro Lys Glu Leu Met Glu Asp Trp Ser Thr Met Glu Val Cys  
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 Val Asp Cys Lys Lys Phe Ile Ser Glu Ile Ile Ser Ser Ser Arg Arg  
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 Asn Thr Thr Glu Ser Ile Trp Ala Cys Leu Ser Cys Ser His Val Ala  
 35 40 45  
 Cys Gly Arg Tyr Ile Glu Glu His Ala Leu Lys His Phe Gln Glu Ser

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Ser His Pro Val Ala Leu Glu Val Asn Glu Met Tyr Val Phe Cys Tyr  
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35 40 45  
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<212> DNA  
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<212> PRT  
<213> Homo sapiens

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Pro Asp Lys Thr Trp Val Lys Lys Gly Glu Pro Leu Pro Val Lys Leu



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 Phe Leu Cys Ile Lys Val Gly Lys Pro Met Arg Lys Ser Phe Ala Thr  
                     130                      135                      140  
 His Thr Ala Ala Met Val Gln Gln Tyr Gly Lys Arg Arg Lys Gln Pro  
 145                      150                      155                      160  
 Glu Tyr Trp Phe Ala Val Pro Arg Glu Arg Val Asp His Leu Tyr Thr  
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 Phe Phe Val Gln Trp Ser Pro Asp Val Tyr Gly Lys Asp Ala Lys Glu  
                     180                      185                      190  
 Gln Gly Phe Val Val Val Glu Lys Glu Glu Leu Asn Met Ile Asp Asn  
                     195                      200                      205  
 Phe Phe Ser Glu Pro Thr Thr Lys Ser Trp Glu Ile Ile Thr Val Glu  
                     210                      215                      220  
 Glu Ala Lys Arg Arg Lys Ser Thr Cys Ser Tyr Tyr Glu Asp Glu Asp  
 225                      230                      235                      240  
 Glu Glu Val Leu Pro Val Leu Arg Pro Pro Arg Ala Phe Trp Glu Asn  
                     245                      250                      255  
 Lys Pro Leu Asn Arg Trp Ala Arg Pro Phe Pro Ala Arg Val Gln Gly  
                     260                      265                      270  
 Tyr Pro Trp Arg Leu Ala Tyr Ser Thr Leu Glu His Gly Thr Ser Leu  
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 Lys Thr Leu Tyr Arg Lys Ser Ala Ser Leu Asp Ser Pro Val Leu Leu  
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 Val Ile Lys  
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<210> 2763  
 <211> 2210  
 <212> DNA  
 <213> Homo sapiens

<400> 2763  
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 180  
 cacacttcca ctctgtgaa acaactgtct tgggcatgag aagggccagg ataggccagg  
 240  
 tgaatggcag gctgccaac aacccaatc ccaaaccaac ctcccaggcc atgggcccac  
 300  
 gtcctgcag gaagatgcta ataggtacaa caggtagaac atgtagacac aaacatctag  
 360  
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1380  
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1440  
gctttgtttc ataatacgc ctgatataag gtttcaagat ccgagaggta taagggtga  
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2040

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<210> 2764

<211> 423

<212> PRT

<213> Homo sapiens

<400> 2764

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			20					25					30		
Val	Ala	Ser	Gly	Pro	Val	Val	Gly	Gly	Arg	Lys	Lys	Val	Arg	Gly	Pro
		35					40					45			
Glu	Gln	Ile	Lys	Gln	Glu	Val	Glu	Ser	Glu	Glu	Glu	Lys	Pro	Asp	Arg
	50					55					60				
Met	Asp	Ile	Asp	Ser	Glu	Asp	Thr	Asp	Ser	Asn	Thr	Ser	Leu	Gln	Thr
65					70					75				80	
Arg	Ala	Arg	Glu	Lys	Arg	Lys	Pro	Gln	Leu	Glu	Lys	Asp	Thr	Lys	Pro
			85					90						95	
Lys	Glu	Pro	Arg	Tyr	Thr	Pro	Val	Ser	Ile	Tyr	Glu	Glu	Lys	Leu	Leu
		100					105						110		
Leu	Lys	Arg	Leu	Glu	Ala	Cys	Pro	Gly	Ala	Val	Ala	Met	Thr	Pro	Glu
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Ala	Arg	Arg	Leu	Lys	Arg	Lys	Leu	Ile	Val	Arg	Gln	Ala	Lys	Arg	Asp
	130					135					140				
Arg	Gly	Leu	Pro	Leu	Phe	Asp	Leu	Asp	Gln	Val	Val	Asn	Ala	Ala	Leu
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Leu	Leu	Val	Asp	Gly	Ile	Tyr	Gly	Ala	Lys	Glu	Gly	Gly	Ile	Ser	Arg
			165					170						175	
Leu	Pro	Ala	Gly	Gln	Ala	Thr	Tyr	Arg	Thr	Thr	Cys	Gln	Asp	Phe	Arg
		180						185					190		
Ile	Leu	Asp	Arg	Tyr	Gln	Thr	Ser	Leu	Pro	Ser	Arg	Lys	Gly	Phe	Arg
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His	Gln	Thr	Thr	Lys	Phe	Leu	Tyr	Arg	Leu	Val	Gly	Ser	Glu	Asp	Met
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Ala	Val	Asp	Gln	Ser	Ile	Val	Ser	Pro	Tyr	Thr	Ser	Arg	Ile	Leu	Lys
225					230					235				240	
Pro	Tyr	Ile	Arg	Arg	Asp	Tyr	Glu	Thr	Lys	Pro	Pro	Lys	Leu	Gln	Leu
			245						250					255	
Leu	Ser	Gln	Ile	Arg	Ser	His	Leu	His	Arg	Ser	Asp	Pro	His	Trp	Thr
		260					265						270		
Pro	Glu	Pro	Asp	Ala	Pro	Leu	Asp	Tyr	Cys	Tyr	Val	Arg	Pro	Asn	His
	275						280					285			
Ile	Pro	Thr	Ile	Asn	Ser	Met	Cys	Gln	Glu	Phe	Phe	Trp	Pro	Gly	Ile
	290					295						300			
Asp	Leu	Ser	Glu	Cys	Leu	Gln	Tyr	Pro	Asp	Phe	Ser	Val	Val	Val	Leu
305					310					315					320
Tyr	Lys	Lys	Val	Ile	Ile	Ala	Phe	Gly	Phe	Met	Val	Pro	Asp	Val	Lys

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          325          330          335
Tyr Asn Glu Ala Tyr Ile Ser Phe Leu Phe Val His Pro Glu Trp Arg
          340          345          350
Arg Ala Gly Ile Ala Thr Phe Met Ile Tyr His Leu Ile Gln Thr Cys
          355          360          365
Met Gly Lys Asp Val Thr Leu His Val Ser Ala Ser Asn Pro Ala Met
          370          375          380
Leu Leu Tyr Gln Lys Phe Gly Phe Lys Thr Glu Glu Tyr Val Leu Asp
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Phe Tyr Asp Lys Tyr Tyr Pro Leu Glu Ser Thr Glu Cys Lys His Ala
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Phe Phe Leu Arg Leu Arg Arg
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<210> 2765  
 <211> 582  
 <212> DNA  
 <213> Homo sapiens

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180
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300
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420
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480
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582

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<210> 2766  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

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<400> 2766
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20     25     30
Ala Arg Ser Leu Cys Ser Ala Gly Thr Gln Pro Ala Pro Ser Thr Thr
35     40     45
Ser Leu Pro Ser Trp Arg Ser Ala Ala Pro Leu Ala Trp Pro Leu Gln

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50 55 60  
Leu Ser Gly Gln Trp Trp Ser Ala Gly Ala Cys Phe Leu Asp Leu Pro  
65 70 75 80  
Ser Leu Ala Leu Cys Trp Pro Gly Asp Ser Gly Asp Ala Glu Trp Pro  
85 90 95  
Glu Ala Gly Ser  
100

&lt;210&gt; 2767

&lt;211&gt; 1202

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2767

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gactcagcct acgacagcaa cgaccctgat gtggaatcca acagcagcag tggcatcagc  
180  
tctcccagca ggcagcccca ggtgcccattg gccacagctg ctggcttgga tagcgcgggc  
240  
ccacaggatg cccgagaggt cagcccagag cccattgtga gcaccgtggc caggctgaaa  
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720  
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1202

<210> 2768  
<211> 282  
<212> PRT  
<213> Homo sapiens

<400> 2768  
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Ser Leu Ala Gln Pro Asp Arg Arg Tyr Ser Glu Pro Ser Met Pro Ser  
35 40 45  
Ser Gln Glu Cys Leu Glu Ser Arg Val Thr Asn Gln Thr Leu Thr Lys  
50 55 60  
Ser Glu Gly Asp Phe Pro Val Pro Arg Val Gly Ser Arg Leu Glu Ser  
65 70 75 80  
Glu Glu Ala Glu Asp Pro Phe Pro Glu Glu Val Phe Pro Ala Val Gln  
85 90 95  
Gly Lys Thr Lys Arg Pro Val Asp Leu Lys Ile Lys Asn Leu Ala Pro  
100 105 110  
Gly Ser Val Leu Pro Arg Ala Leu Val Leu Lys Ala Phe Ser Ser Ser  
115 120 125  
Ser Leu Asp Ala Ser Ser Asp Ser Ser Pro Val Ala Ser Pro Ser Ser  
130 135 140  
Pro Lys Arg Asn Phe Phe Ser Arg His Gln Ser Phe Thr Thr Lys Thr  
145 150 155 160  
Glu Lys Gly Lys Pro Ser Arg Glu Ile Lys Lys His Ser Met Ser Phe  
165 170 175  
Thr Phe Ala Pro His Lys Lys Val Leu Thr Lys Asn Leu Ser Ala Gly  
180 185 190  
Ser Gly Lys Ser Gln Asp Phe Thr Arg Asp His Val Pro Arg Gly Val  
195 200 205  
Arg Lys Glu Ser Gln Leu Ala Gly Arg Ile Val Gln Glu Asn Gly Cys  
210 215 220  
Glu Thr His Asn Gln Thr Ala Arg Gly Phe Cys Leu Arg Pro His Ala  
225 230 235 240  
Leu Ser Val Asp Asp Val Phe Gln Gly Ala Asp Trp Glu Arg Pro Gly  
245 250 255  
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260 265 270  
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<210> 2769  
<211> 1286  
<212> DNA  
<213> Homo sapiens

<400> 2769  
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300  
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360  
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<210> 2770  
<211> 228  
<212> PRT  
<213> Homo sapiens

<400> 2770  
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20 25 30  
Asn Arg Ile Arg Val Arg Gln Asp Leu Ala Ser Leu Pro Ala Glu Leu

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Ile Asn Gln Ile Gly Asn Arg Cys His Pro Lys Leu Tyr Asp Glu Gly
  50      55      60
Asp Pro Ser Glu Lys Leu Glu Leu Val Thr Gly Thr Asn Val Tyr Ile
  65      70      75      80
Thr Arg Ala Gln Leu Met Asn Cys His Val Ser Ala Gly Thr Arg His
      85      90      95
Lys Val Leu Leu Arg Arg Leu Leu Ala Ser Phe Phe Asp Arg Asn Thr
      100      105      110
Leu Ala Asn Ser Cys Gly Thr Gly Ile Arg Ser Ser Thr Asn Asp Pro
      115      120      125
Arg Arg Lys Pro Leu Asp Ser Arg Val Leu His Ala Val Lys Tyr Tyr
      130      135      140
Cys Gln Asn Phe Ala Pro Asn Phe Lys Glu Ser Glu Met Asn Ala Ile
      145      150      155      160
Ala Ala Asp Met Cys Thr Asn Ala Arg Arg Val Val Arg Lys Ser Trp
      165      170      175
Met Pro Lys Val Lys Val Leu Lys Ala Glu Asp Asp Ala Tyr Thr Thr
      180      185      190
Phe Ile Ser Glu Thr Gly Lys Ile Glu Pro Asp Met Met Gly Val Glu
      195      200      205
His Gly Phe Glu Thr Ala Ser His Glu Gly Glu Ala Gly Pro Ile Ala
      210      215      220
Glu Ala Leu Gln
225

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&lt;210&gt; 2771

&lt;211&gt; 1668

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2771

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600
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660

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<210> 2772  
 <211> 258  
 <212> PRT  
 <213> Homo sapiens

<400> 2772  
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 35 40 45  
 Thr Thr Leu Gly Thr Leu Arg Lys Phe Pro Gly Ser Lys Leu Ala Glu  
 50 55 60  
 Met Phe Ser Ser Leu Ala Lys Ala Ser Thr Asp Ala Glu Gly Arg Phe  
 65 70 75 80  
 Phe Ile Asp Arg Pro Ser Thr Tyr Phe Arg Pro Ile Leu Asp Tyr Leu  
 85 90 95  
 Arg Thr Gly Gln Val Pro Thr Gln His Ile Pro Glu Val Tyr Arg Glu

100	105	110
Ala Gln Phe Tyr Glu Ile Lys Pro Leu Val Lys Leu Leu Glu Asp Met		
115	120	125
Pro Gln Ile Phe Gly Glu Gln Val Ser Arg Lys Gln Phe Leu Leu Gln		
130	135	140
Val Pro Gly Tyr Ser Glu Asn Leu Glu Leu Met Val Arg Leu Ala Arg		
145	150	155
Ala Glu Ala Ile Thr Ala Arg Lys Ser Ser Val Leu Val Cys Leu Val		
165	170	175
Glu Thr Glu Glu Gln Asp Ala Tyr Tyr Ser Glu Val Leu Cys Phe Leu		
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&lt;210&gt; 2778

&lt;211&gt; 1146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2778

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20 25 30  
Pro Ala Thr Met Gln Pro Ile Pro Glu Ala His Ser Leu Tyr Val Thr  
35 40 45  
Leu Ile Leu Ser Asp Ser Val Met Asn Ile Phe Lys Asp Arg Asn Phe  
50 55 60  
Asp Ser Cys Cys Ile Cys Ala Cys Asn Met Asn Ile Lys Gly Ala Asp  
65 70 75 80  
Val Gly Leu Tyr Ile Pro Asp Ser Ser Asn Glu Asp Gln Tyr Arg Cys  
85 90 95  
Thr Cys Gly Phe Ser Ala Ile Met Asn Arg Lys Leu Gly Tyr Asn Ser  
100 105 110  
Gly Leu Phe Leu Glu Asp Glu Leu Asp Ile Phe Gly Lys Asn Ser Asp  
115 120 125  
Ile Gly Gln Ala Ala Glu Arg Arg Leu Met Met Cys Gln Ser Thr Phe  
130 135 140  
Leu Pro Gln Val Glu Gly Thr Lys Lys Pro Gln Glu Pro Pro Ile Ser  
145 150 155 160  
Leu Leu Leu Leu Leu Gln Asn Gln His Thr Gln Pro Phe Ala Ser Leu  
165 170 175  
Asn Phe Leu Asp Tyr Ile Ser Ser Asn Asn Arg Gln Thr Leu Pro Cys  
180 185 190  
Val Ser Trp Ser Tyr Asp Arg Val Gln Ala Asp Asn Asn Asp Tyr Trp  
195 200 205  
Thr Glu Cys Phe Asn Ala Leu Glu Gln Gly Arg Gln Tyr Val Asp Asn  
210 215 220  
Pro Thr Gly Gly Lys Val Asp Glu Ala Leu Val Arg Ser Ala Thr Val  
225 230 235 240  
His Ser Trp Pro His Ser Asn Val Leu Asp Ile Ser Met Leu Ser Ser  
245 250 255  
Gln Asp Val Val Arg Met Leu Leu Ser Leu Gln Pro Phe Leu Gln Asp  
260 265 270  
Ala Ile Gln Lys Lys Arg Thr Gly Arg Thr Trp Glu Asn Ile Gln His  
275 280 285  
Val Gln Gly Pro Leu Thr Trp Gln Gln Phe His Lys Met Ala Gly Arg  
290 295 300  
Gly Thr Tyr Gly Ser Glu Glu Ser Pro Glu Pro Leu Pro Ile Pro Thr  
305 310 315 320  
Leu Leu Val Gly Tyr Asp Lys Asp Phe Leu Thr Ile Ser Pro Phe Ser  
325 330 335  
Leu Pro Phe Trp Glu Arg Leu Leu Leu Asp Pro Tyr Gly Gly His Arg  
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Asp Val Ala Tyr Ile Val Val Cys Pro Glu Asn Glu Ala Leu Leu Glu  
355 360 365  
Gly Ala Lys Thr Phe Phe Arg Asp Leu Ser Ala Val Tyr Glu Met Cys  
370 375 380  
Arg Leu Gly Gln His Lys Pro Ile Cys Lys Val Leu Arg Asp Gly Ile

385					390					395				400	
Met	Arg	Val	Gly	Lys	Thr	Val	Ala	Gln	Lys	Leu	Thr	Asp	Glu	Leu	Val
				405					410					415	
Ser	Glu	Trp	Phe	Asn	Gln	Pro	Trp	Ser	Gly	Glu	Glu	Asn	Asp	Asn	His
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Ser	Arg	Leu	Lys	Leu	Tyr	Ala	Gln	Val	Cys	Arg	His	His	Leu	Ala	Pro
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Ala	Gly	Pro	Leu	Ala	Pro	Asn	Gly	Ser	Ala	Ala	Pro	Pro	Ala	Gly	Ser
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Ala	Phe	Asn	Pro	Thr	Ser	Asn	Ser	Ser	Ser	Thr	Asn	Pro	Ala	Ala	Ser
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Ser	Ser	Ala	Ser	Gly	Ser	Ser	Val	Pro	Pro	Val	Ser	Ser	Ser	Ala	Ser
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Ala	Pro	Gly	Ile	Ser	Gln	Ile	Ser	Thr	Thr	Ser	Ser	Ser	Gly	Phe	Ser
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Gly	Ser	Val	Gly	Gly	Gln	Asn	Pro	Ser	Thr	Gly	Gly	Ile	Ser	Ala	Asp
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Arg	Thr	Gln	Arg	Asn	Ile	Gly	Cys	Gly	Gly	Asp	Thr	Asp	Pro	Gly	Gln
			565					570						575	
Ser	Ser	Ser	Gln	Pro	Ser	Gln	Asp	Gly	Gln	Glu	Ser	Val	Thr	Glu	Arg
	580					585						590			
Glu	Arg	Ile	Gly	Ile	Pro	Thr	Glu	Pro	Asp	Ser	Ala	Asp	Ser	His	Ala
	595				600						605				
His	Pro	Pro	Ala	Val	Val	Ile	Tyr	Met	Val	Asp	Pro	Phe	Thr	Tyr	Ala
	610				615						620				
Ala	Glu	Glu	Asp	Ser	Thr	Ser	Gly	Asn	Phe	Trp	Leu	Leu	Ser	Leu	Met
625				630						635				640	
Arg	Cys	Tyr	Thr	Glu	Met	Leu	Asp	Asn	Leu	Pro	Glu	His	Met	Arg	Asn
			645					650					655		
Ser	Phe	Ile	Leu	Gln	Ile	Val	Pro	Cys	Gln	Tyr	Met	Leu	Gln	Thr	Met
	660					665						670			
Lys	Asp	Glu	Gln	Val	Phe	Tyr	Ile	Gln	Tyr	Leu	Lys	Ser	Met	Ala	Phe
	675				680						685				
Ser	Val	Tyr	Cys	Gln	Cys	Arg	Arg	Pro	Leu	Pro	Thr	Gln	Ile	His	Ile
	690				695						700				
Lys	Ser	Leu	Thr	Gly	Phe	Gly	Pro	Ala	Ala	Ser	Ile	Glu	Met	Thr	Leu
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Lys	Asn	Pro	Glu	Arg	Pro	Ser	Pro	Ile	Gln	Leu	Tyr	Ser	Pro	Pro	Phe
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Ile	Leu	Ala	Pro	Ile	Lys	Asp	Lys	Gln	Thr	Glu	Leu	Gly	Glu	Thr	Phe
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Gly	Glu	Ala	Ser	Gln	Lys	Tyr	Asn	Val	Leu	Phe	Val	Gly	Tyr	Cys	Leu
	755				760						765				
Ser	His	Asp	Gln	Arg	Trp	Leu	Leu	Ala	Ser	Cys	Thr	Asp	Leu	His	Gly
	770				775						780				
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Ser Ile Leu Leu Gly Glu Cys Ser Leu Gln Thr Ile Ser Lys Lys Leu  
850 855 860  
Lys Asp Val Cys Arg Met Cys Gly Ile Ser Ala Ala Asp Ser Pro Ser  
865 870 875 880  
Ile Leu Ser Ala Cys Leu Val Ala Met Glu Pro Gln Gly Ser Phe Val  
885 890 895  
Val Met Pro Asp Ala Val Thr Met Gly Ser Val Phe Gly Arg Ser Thr  
900 905 910  
Ala Leu Asn Met Gln Ser Ser Gln Leu Asn Thr Pro Gln Asp Ala Ser  
915 920 925  
Cys Thr His Ile Leu Val Phe Pro Thr Ser Ser Thr Ile Gln Val Ala  
930 935 940  
Pro Ala Asn Tyr Pro Asn Glu Asp Gly Phe Ser Pro Asn Asn Asp Asp  
945 950 955 960  
Met Phe Val Asp Leu Pro Phe Pro Asp Asp Met Asp Asn Asp Ile Gly  
965 970 975  
Ile Leu Met Thr Gly Asn Leu His Ser Ser Pro Asn Ser Ser Pro Val  
980 985 990  
Pro Ser Pro Gly Ser Pro Ser Gly Ile Gly Val Gly Ser His Phe Gln  
995 1000 1005  
His Ser Arg Ser Gln Gly Glu Arg Leu Leu Ser Arg Glu Ala Pro Glu  
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Lys Ala Glu Asn Leu Pro Gln Trp Phe Trp Ser Ser Cys Pro Gln Ala  
1045 1050 1055  
Gln Asn Gln Cys Pro Leu Phe Leu Lys Ala Ser Leu His His His Ile  
1060 1065 1070  
Ser Val Ala Gln Thr Asp Glu Leu Leu Pro Ala Arg Asn Ser Gln Arg  
1075 1080 1085  
Val Pro His Pro Leu Asp Ser Lys Thr Thr Ser Asp Val Leu Arg Phe  
1090 1095 1100  
Val Leu Glu Gln Tyr Asn Ala Leu Ser Trp Leu Thr Cys Asn Pro Ala  
1105 1110 1115 1120  
Thr Gln Asp Arg Thr Ser Cys Leu Pro Val His Phe Val Val Leu Thr  
1125 1130 1135  
Gln Leu Tyr Asn Ala Ile Met Asn Ile Leu  
1140 1145

&lt;210&gt; 2779

&lt;211&gt; 2461

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2779

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180

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2461

&lt;210&gt; 2780

&lt;211&gt; 720

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2780

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Lys	Glu	Phe	Gly	Leu	Phe	Glu	Glu	Leu	Ser	Glu	Gly	Ser	Phe	Gly	Trp
			20					25					30		
Val	Thr	Gly	Ile	Arg	Arg	Met	Arg	Phe	Lys	Gly	Leu	Ala	Gly	Val	Asp
		35					40					45			
Ser	Ser	Leu	Glu	Val	Val	Ser	Leu	Leu	Pro	Pro	Arg	Ser	Phe	Ser	Leu
		50					55				60				
Asn	Ser	Glu	Gly	Ala	Glu	Arg	Met	Ala	Thr	Thr	Gly	Thr	Pro	Thr	Ala
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Asp	Arg	Gly	Asp	Ala	Ala	Ala	Thr	Asp	Asp	Pro	Ala	Ala	Arg	Phe	Gln
				85				90					95		
Val	Gln	Lys	His	Ser	Trp	Asp	Gly	Leu	Arg	Ser	Ile	Ile	His	Gly	Ser
			100					105					110		
Arg	Lys	Tyr	Ser	Gly	Leu	Ile	Val	Asn	Lys	Ala	Pro	His	Asp	Phe	Gln
		115					120					125			
Phe	Val	Gln	Lys	Thr	Asp	Glu	Ser	Gly	Pro	His	Ser	His	Arg	Leu	Tyr
		130					135				140				
Tyr	Leu	Gly	Met	Pro	Tyr	Gly	Ser	Arg	Glu	Asn	Ser	Leu	Leu	Tyr	Ser
145					150					155				160	
Glu	Ile	Pro	Lys	Lys	Val	Arg	Lys	Glu	Ala	Leu	Leu	Leu	Leu	Ser	Trp
				165				170						175	
Lys	Gln	Met	Leu	Asp	His	Phe	Gln	Ala	Thr	Pro	His	His	Gly	Val	Tyr



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195 200 205  
Gly Ile Thr Ser Tyr Asp Phe His Ser Glu Ser Gly Leu Phe Leu Phe  
210 215 220  
Gln Ala Ser Asn Ser Leu Phe His Cys Arg Asp Gly Gly Lys Asn Gly  
225 230 235 240  
Phe Met Val Ser Pro Gly Pro Gly Cys Val Ser Pro Met Lys Pro Leu  
245 250 255  
Glu Ile Lys Thr Gln Cys Ser Gly Pro Arg Met Asp Pro Lys Ile Cys  
260 265 270  
Pro Ala Asp Pro Ala Phe Phe Ser Phe Ile Asn Asn Ser Asp Leu Trp  
275 280 285  
Val Ala Asn Ile Glu Thr Gly Glu Glu Arg Arg Leu Thr Phe Cys His  
290 295 300  
Gln Gly Leu Ser Asn Val Leu Asp Asp Pro Lys Ser Ala Gly Val Ala  
305 310 315 320  
Thr Phe Val Ile Gln Glu Glu Phe Asp Arg Phe Thr Gly Tyr Trp Trp  
325 330 335  
Cys Pro Thr Ala Ser Trp Glu Gly Ser Glu Gly Leu Lys Thr Leu Arg  
340 345 350  
Ile Leu Tyr Glu Glu Val Asp Glu Ser Glu Val Glu Val Ile His Val  
355 360 365  
Pro Ser Pro Ala Leu Glu Glu Arg Lys Thr Asp Ser Tyr Arg Tyr Pro  
370 375 380  
Arg Thr Gly Ser Lys Asn Pro Lys Ile Ala Leu Lys Leu Ala Glu Phe  
385 390 395 400  
Gln Thr Asp Ser Gln Gly Lys Ile Val Ser Thr Gln Glu Lys Glu Leu  
405 410 415  
Val Gln Pro Phe Ser Ser Leu Phe Pro Lys Val Glu Tyr Ile Ala Arg  
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Ala Gly Trp Thr Arg Asp Gly Lys Tyr Ala Trp Ala Met Phe Leu Asp  
435 440 445  
Arg Pro Gln Gln Trp Leu Gln Leu Val Leu Leu Pro Pro Ala Leu Phe  
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Ile Pro Ser Thr Glu Asn Glu Glu Gln Arg Leu Ala Ser Ala Arg Ala  
465 470 475 480  
Val Pro Arg Asn Val Gln Pro Tyr Val Val Tyr Glu Glu Val Thr Asn  
485 490 495  
Val Trp Ile Asn Val His Asp Ile Phe Tyr Pro Phe Pro Gln Ser Glu  
500 505 510  
Gly Glu Asp Glu Leu Cys Phe Leu Arg Ala Asn Glu Cys Lys Thr Gly  
515 520 525  
Phe Cys His Leu Tyr Lys Val Thr Ala Val Leu Lys Ser Gln Gly Tyr  
530 535 540  
Asp Trp Ser Glu Pro Phe Ser Pro Gly Glu Asp Glu Phe Lys Cys Pro  
545 550 555 560  
Ile Lys Glu Glu Ile Ala Leu Thr Ser Gly Glu Trp Glu Val Leu Ala  
565 570 575  
Arg His Gly Ser Lys Ile Trp Val Asn Glu Glu Thr Lys Leu Val Tyr  
580 585 590  
Phe Gln Gly Thr Lys Asp Thr Pro Leu Glu His His Leu Tyr Val Val  
595 600 605  
Ser Tyr Glu Ala Ala Gly Glu Ile Val Arg Leu Thr Thr Pro Gly Phe

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625	630	635
Tyr Ser Ser Val Ser Thr Pro Pro Cys Val His Val Tyr Lys Leu Ser		640
	645	650
Gly Pro Asp Asp Asp Pro Leu His Lys Gln Pro Arg Phe Trp Ala Ser		655
	660	665
Met Met Glu Ala Ala Ser Cys Pro Pro Asp Tyr Val Pro Pro Glu Ile		670
	675	680
Phe His Phe His Thr Arg Ser Asp Val Arg Leu Tyr Gly Met Ile Tyr		685
	690	695
Lys Pro His Ala Leu Gln His Ile Thr Lys Lys Ser Thr Val Phe Glu		700
705	710	715
		720

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 <212> DNA  
 <213> Homo sapiens

<400> 2781  
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 gacctcctgt cagatcttga tgagttttct tccagattca agaacctggc ccaccagcac  
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 540  
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<210> 2782  
<211> 314  
<212> PRT  
<213> Homo sapiens

<400> 2782  
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Ala Arg Thr Gly Leu Arg Ile Cys Asp Leu Leu Ser Asp Phe Asp Glu  
35 40 45  
Phe Ser Ser Arg Phe Lys Asn Leu Ala His Gln His Gln Ser Met Phe  
50 55 60  
Pro Thr Leu Glu Ile Asp Ile Glu Gly Gln Leu Lys Arg Leu Lys Gly  
65 70 75 80  
Phe Ala Glu Arg Ile Arg Pro Met Val Arg Asp Gly Val Tyr Phe Met  
85 90 95  
Tyr Glu Ala Leu His Gly Pro Pro Lys Lys Ile Leu Val Glu Gly Ala  
100 105 110  
Asn Ala Ala Leu Leu Asp Ile Asp Phe Gly Thr Tyr Pro Phe Val Thr  
115 120 125  
Ser Ser Asn Cys Thr Val Gly Gly Val Cys Thr Gly Leu Gly Ile Pro  
130 135 140  
Pro Gln Asn Ile Gly Asp Val Tyr Gly Val Val Lys Ala Tyr Thr Thr  
145 150 155 160  
Arg Val Gly Ile Gly Ala Phe Pro Thr Glu Gln Ile Asn Glu Ile Gly  
165 170 175  
Gly Leu Leu Gln Thr Arg Gly His Glu Trp Gly Val Thr Thr Gly Arg  
180 185 190  
Lys Arg Arg Cys Gly Trp Leu Asp Leu Met Ile Leu Arg Tyr Ala His  
195 200 205  
Met Val Asn Gly Phe Thr Ala Leu Ala Leu Thr Lys Leu Asp Ile Leu  
210 215 220  
Asp Val Leu Gly Glu Val Lys Val Gly Val Ser Tyr Lys Leu Asn Gly  
225 230 235 240  
Lys Arg Ile Pro Tyr Phe Pro Ala Asn Gln Glu Met Leu Gln Lys Val  
245 250 255  
Glu Val Glu Tyr Glu Thr Leu Pro Gly Trp Lys Ala Asp Thr Thr Gly  
260 265 270  
Ala Arg Arg Trp Glu Asp Leu Pro Pro Gln Ala Gln Asn Tyr Ile Arg  
275 280 285  
Phe Val Glu Asn His Val Gly Val Ala Val Lys Trp Val Gly Val Gly

290 295 300  
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<210> 2783  
<211> 2376  
<212> DNA  
<213> Homo sapiens

<400> 2783  
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240  
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720  
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1080  
ccttaactgc aaagccagag cagataactt ggggtgtgtg tggggatgtg tgtgtgggcc  
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1260  
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1320

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 1920  
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 1980  
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 2040  
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 2160  
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 2220  
 aacaggattt tgcttaaaat acttggtact tgtcccaaat caaaatattc caaaatctta  
 2280  
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 2376

&lt;210&gt; 2784

&lt;211&gt; 361

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2784

Ala	Glu	Arg	Gln	Ile	Glu	Glu	Asn	Arg	Glu	Arg	Glu	Trp	Glu	Arg	
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Glu	Val	Leu	Gly	Ile	Lys	Arg	Asp	Lys	Ser	Asp	Ser	Pro	Ala	Ile	Gln
		20					25				30				
Leu	Arg	Leu	Lys	Glu	Pro	Met	Asp	Val	Asp	Val	Glu	Asp	Tyr	Tyr	Pro
		35					40				45				
Ala	Phe	Leu	Asp	Met	Val	Arg	Ser	Leu	Leu	Asp	Gly	Asn	Ile	Asp	Ser
	50					55				60					
Ser	Gln	Tyr	Glu	Asp	Ser	Leu	Arg	Glu	Met	Phe	Thr	Ile	His	Ala	Tyr
65					70				75					80	
Ile	Ala	Phe	Thr	Met	Asp	Lys	Leu	Ile	Gln	Ser	Ile	Val	Arg	Gln	Leu

85 90 95  
Gln His Ile Val Ser Asp Glu Ile Cys Val Gln Val Thr Asp Leu Tyr  
100 105 110  
Leu Ala Glu Asn Asn Asn Gly Ala Thr Gly Gly Gln Leu Asn Thr Gln  
115 120 125  
Asn Ser Arg Ser Leu Leu Glu Ser Thr Tyr Gln Arg Lys Ala Glu Gln  
130 135 140  
Leu Met Ser Asp Glu Asn Cys Phe Lys Leu Met Phe Ile Gln Ser Gln  
145 150 155 160  
Gly Gln Val Gln Leu Thr Ile Glu Leu Leu Asp Thr Glu Glu Glu Asn  
165 170 175  
Ser Asp Asp Pro Val Glu Ala Glu Arg Trp Ser Asp Tyr Val Glu Arg  
180 185 190  
Tyr Met Asn Ser Asp Thr Thr Ser Pro Glu Leu Arg Glu His Leu Ala  
195 200 205  
Gln Lys Pro Val Phe Leu Pro Arg Asn Leu Arg Arg Ile Arg Lys Cys  
210 215 220  
Gln Arg Gly Arg Glu Gln Gln Glu Lys Glu Gly Lys Glu Gly Asn Ser  
225 230 235 240  
Lys Lys Thr Met Glu Asn Val Asp Ser Leu Asp Lys Leu Glu Cys Arg  
245 250 255  
Phe Lys Leu Asn Ser Tyr Lys Met Val Tyr Val Ile Lys Ser Glu Asp  
260 265 270  
Tyr Met Tyr Arg Arg Thr Ala Leu Leu Arg Ala His Gln Ser His Glu  
275 280 285  
Arg Val Ser Lys Arg Leu His Gln Arg Phe Gln Ala Trp Val Asp Lys  
290 295 300  
Trp Thr Lys Glu His Val Pro Arg Glu Met Ala Ala Glu Thr Ser Lys  
305 310 315 320  
Trp Leu Met Gly Glu Gly Leu Glu Gly Leu Val Pro Cys Thr Thr Thr  
325 330 335  
Cys Asp Thr Glu Thr Leu His Phe Val Ser Ile Asn Lys Tyr Arg Val  
340 345 350  
Lys Tyr Gly Thr Val Phe Lys Ala Pro  
355 360

&lt;210&gt; 2785

&lt;211&gt; 492

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2785

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120  
tgatgagatc ctcttcaca tcctgagtcg cgtccccagc acagatctga ttctgaacgt  
180  
ccggcgtacc tgtcggaagc ttgcagccct gtgccttgac aagagcctca tccacaccgt  
240  
gttgctgcaa aaggactatc aggcgagcga ggacaaagtg aggcagctgg tgaaggagat  
300  
cggccgggag atccagcagc tgagcatggc tggctgctac tggctgcctg gctccaccgt  
360

ggaacacgtg gcccgctgcc cgcagcctgg tgaagggtgaa cctctcgggc tgccacctca  
420  
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480  
acgtgagccc cg  
492

<210> 2786  
<211> 155  
<212> PRT  
<213> Homo sapiens

<400> 2786  
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Pro Ala Ala Ala Gly Met Ala Asp Gly Val His Leu Leu Gly Phe Ser  
20 25 30  
Asp Glu Ile Leu Leu His Ile Leu Ser His Val Pro Ser Thr Asp Leu  
35 40 45  
Ile Leu Asn Val Arg Arg Thr Cys Arg Lys Leu Ala Ala Leu Cys Leu  
50 55 60  
Asp Lys Ser Leu Ile His Thr Val Leu Leu Gln Lys Asp Tyr Gln Ala  
65 70 75 80  
Ser Glu Asp Lys Val Arg Gln Leu Val Lys Glu Ile Gly Arg Glu Ile  
85 90 95  
Gln Gln Leu Ser Met Ala Gly Cys Tyr Trp Leu Pro Gly Ser Thr Val  
100 105 110  
Glu His Val Ala Arg Cys Pro Gln Pro Gly Glu Gly Glu Pro Leu Gly  
115 120 125  
Leu Pro Pro His Phe Pro Ala Pro Leu Gln Asp Ala Leu Gly Pro Ala  
130 135 140  
Ala Pro Ala Leu Ala Gly His Arg Arg Glu Pro  
145 150 155

<210> 2787  
<211> 299  
<212> DNA  
<213> Homo sapiens

<400> 2787  
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120  
acaatgcaca gacatggcag tatecttctg gtgggaggga gtcaccattt gctctgccct  
180  
gccctctgct ggggtgctctt acaggtgcta ctgcatccag cgcttgaaac aattctgtgg  
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299

<210> 2788  
<211> 95  
<212> PRT

<213> Homo sapiens

<400> 2788

Met Thr Arg Asp Ser Gly Met Lys Gln Lys His Ala Ala Ser Thr Ser  
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20 25 30  
Ala Gly His Ala Thr Met His Arg His Gly Ser Ile Leu Leu Val Gly  
35 40 45  
Gly Ser His His Leu Leu Cys Pro Ala Leu Cys Trp Val Leu Leu Gln  
50 55 60  
Val Leu Leu His Pro Ala Leu Glu Thr Ile Leu Trp Gly Ile Asp Ser  
65 70 75 80  
Glu Glu Ile Thr Asp Gly Arg Asp Phe Leu Pro Gln Leu Thr Gln  
85 90 95

<210> 2789

<211> 492

<212> DNA

<213> Homo sapiens

<400> 2789

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120  
gcgaggccag gctgtgcagt ggggccagca ccagctgcag cttctcctcc agcaggtcca  
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300  
cccagggaga ggcagagcca gaagactcag gcccaggcct ctgccacccc cgctgcctgc  
360  
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492

<210> 2790

<211> 141

<212> PRT

<213> Homo sapiens

<400> 2790

Arg Lys Ser Ala Arg Ser Gly Ser Arg Cys Gly Arg Ala Ala Gly Arg  
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20 25 30  
Ala Arg Pro Gly Cys Ala Val Gly Pro Ala Pro Ala Ala Ala Ser Pro  
35 40 45  
Pro Ala Gly Pro Pro Trp Thr Ala Ala Ser Ala Leu Leu Pro Ser Leu



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      50              55              60
His Cys Pro Leu Leu Arg Ala Glu Pro Gly Ala Gly Ser Arg Pro Ala
65              70              75              80
Gly Ser Pro Pro Thr Pro Pro Gly Leu Pro Pro Val Pro Arg Glu Arg
      85              90              95
Gln Ser Gln Lys Thr Gln Ala Gln Ala Ser Ala Thr Pro Ala Ala Cys
      100             105             110
Leu Ala Leu Ala Arg Gly Leu Arg Leu Cys Arg Leu Ser Thr Ser Gly
      115             120             125
Arg Val Ala Leu Arg Arg Gly Ser Gly Ser Arg Pro Arg
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<210> 2791  
 <211> 1271  
 <212> DNA  
 <213> Homo sapiens

<400> 2791  
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 120  
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 180  
 gtaagattat atccaaatat ttactcctgg ttgtctctct tgggcaagct gtgaatatga  
 240  
 tcaaaatatt taaagaagga agaaggtaaa gatctaaaat atgacatgaa aatacccaga  
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 720  
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 960  
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 1020  
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 1080

gtaacagggg gaggagaggg tgtgccatca agaggcaaca tggaggtgtt tcaaacctat  
1140  
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gctcactgtc t  
1271

<210> 2792  
<211> 123  
<212> PRT  
<213> Homo sapiens

<400> 2792  
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Phe Thr Phe Thr Ile Pro Asp Val Glu Asp Ser Ser Gln Arg Pro Asp  
20 25 30  
Gln Gly Pro Gln Arg Pro Pro Pro Glu Gly Leu Leu Pro Arg Pro Pro  
35 40 45  
Gly Asp Ser Gly Asn Gln Asp Asp Gly Pro Gln Gln Arg Pro Pro Lys  
50 55 60  
Pro Gly Gly His His Arg His Pro Pro Pro Pro Phe Gln Asn Gln  
65 70 75 80  
Gln Arg Pro Pro Gln Arg Gly His Arg Gln Leu Ser Leu Pro Arg Phe  
85 90 95  
Pro Ser Val Ser Leu Gln Glu Ala Ser Ser Phe Phe Arg Arg Asp Arg  
100 105 110  
Pro Ala Arg His Pro Gln Glu Gln Pro Leu Trp  
115 120

<210> 2793  
<211> 847  
<212> DNA  
<213> Homo sapiens

<400> 2793  
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120  
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cggccctgag agctgactct gcagctgagg tagagagaca acgatcagga accctaagaa  
240  
gaggcgccag aggagccgcc ttctgcctca gaacggcggtg actcggagaa ttggagcggt  
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420  
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480

ggacagtttc agtgcattac aggtcctgct caggttccaa tgatgtcccc aaatggttct  
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caccgttctc cacatcctcc tctacctggt ttcattcctg tcccaactat gatgccgct  
720  
caccacgtca tatgtactca cccgtgactg gagctggaga catgacaaca cagtatatgc  
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840  
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847

<210> 2794  
<211> 139  
<212> PRT  
<213> Homo sapiens

<400> 2794  
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Gln Val Ile Leu Val Gln Val Asn Pro Gly Glu Ala Phe Thr Ile Arg  
35 40 45  
Arg Glu Asp Gly Gln Phe Gln Cys Ile Thr Gly Pro Ala Gln Val Pro  
50 55 60  
Met Met Ser Pro Asn Gly Ser Val Pro Pro Ile Tyr Val Pro Pro Gly  
65 70 75 80  
Tyr Ala Pro Gln Val Ile Glu Asp Asn Gly Val Arg Arg Val Val Val  
85 90 95  
Val Pro Gln Ala Pro Glu Phe His Pro Gly Ser His Thr Val Leu His  
100 105 110  
Arg Ser Pro His Pro Pro Leu Pro Gly Phe Ile Pro Val Pro Thr Met  
115 120 125  
Met Pro Pro His His Val Ile Cys Thr His Pro  
130 135

<210> 2795  
<211> 1022  
<212> DNA  
<213> Homo sapiens

<400> 2795  
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gcctggcagc tgctggttgt ggaatagttc tggatgccaa tctcctccag gctcctgcgg  
180  
atgtcaccca gcatggaaag gacatcttga gtgggcacca cccctgctc gccaccagt  
240

gtcatgagaa ggtgctgctc cttctcgctg ggcttgctca gagagatgtg ccaggcccca  
300  
tggtggccac tgccatggcg gggcagcacc tcttccacca gggccaggag ctgtggcccc  
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840  
gtgactgaag gcagcagcaa gctgggcccc atgctgctct ccacctcatc aggtgagnna  
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1020  
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1022

<210> 2796  
<211> 56  
<212> PRT  
<213> Homo sapiens

<400> 2796  
Ala Ser Ala Ala Cys Pro Ser Arg Ser Cys Trp Leu Arg Ser Ser Cys  
1 5 10 15  
Pro Lys Val Ala Glu Glu Gly Val Ser Ser Met Ser Pro Gly Ala Ser  
20 25 30  
Gly Glu Glu Ala Glu Val Leu Glu Pro Arg Gly Ser Ser Ser Gly Cys  
35 40 45  
Ser Ala Pro Leu Gly Ala Val Val  
50 55

<210> 2797  
<211> 475  
<212> DNA  
<213> Homo sapiens

<400> 2797  
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120

ctgaactcca tcagcgagtc cccgcatgag cgcatgcacc cctacatcga gctggcctgg  
180  
ggctttctcca ccgtgcttgg catcctaactc ttcttgcccg aggtggtgct gctctgctgg  
240  
atcaagttcc tccccgtgga tgcccgggcg cagcctggcc cccacactgg ccctgggagt  
300  
cacacgggct ggcaggccgc cctggtgtcc accatcatca tgggtgcccg gggcctcatc  
360  
ttcgtggtct tcaccatcca cttctaccgc tccctggtgc gccacaaaac ggagcgccac  
420  
aaccgcgaga tcgaggagct ccacaagctc aaggtccagc tggacgggca tgagc  
475

&lt;210&gt; 2798

&lt;211&gt; 158

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2798

Arg	Pro	Leu	Leu	Ile	Ala	Phe	Ser	Ala	Cys	Thr	Thr	Val	Leu	Val	Ala
1			5					10					15		
Val	His	Leu	Phe	Ala	Leu	Leu	Ile	Ser	Thr	Cys	Ile	Leu	Pro	Asn	Val
		20					25					30			
Glu	Ala	Val	Ser	Asn	Ile	His	Asn	Leu	Asn	Ser	Ile	Ser	Glu	Ser	Pro
	35					40					45				
His	Glu	Arg	Met	His	Pro	Tyr	Ile	Glu	Leu	Ala	Trp	Gly	Phe	Ser	Thr
	50				55					60					
Val	Leu	Gly	Ile	Leu	Leu	Phe	Leu	Ala	Glu	Val	Val	Leu	Leu	Cys	Trp
65			70					75						80	
Ile	Lys	Phe	Leu	Pro	Val	Asp	Ala	Arg	Arg	Gln	Pro	Gly	Pro	Pro	Pro
		85					90					95			
Gly	Pro	Gly	Ser	His	Thr	Gly	Trp	Gln	Ala	Ala	Leu	Val	Ser	Thr	Ile
	100					105					110				
Ile	Met	Val	Pro	Val	Gly	Leu	Ile	Phe	Val	Val	Phe	Thr	Ile	His	Phe
	115				120					125					
Tyr	Arg	Ser	Leu	Val	Arg	His	Lys	Thr	Glu	Arg	His	Asn	Arg	Glu	Ile
	130				135					140					
Glu	Glu	Leu	His	Lys	Leu	Lys	Val	Gln	Leu	Asp	Gly	His	Glu		
145				150						155					

&lt;210&gt; 2799

&lt;211&gt; 2872

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2799

ntatctttcg attcatctgt ggggtttcgg tttggaatga ccagcttgca aggcagggcc  
60  
aatgggatga tggagtgtctg gtagaccagg gcagacagcg atccgaagtt tggctcattg  
120  
gggcagccct tgagcttgac tcctctgggg ccagtctcta tcagaaaatg cctgaccagc  
180  
tcattgggtca tgtctccttt tttattctgc tgcattgatgg ttggagggtgg cgaagacacc  
240

ttcatggcca gcccgtaaa gcctgagatc tccagggagc aggccatcgc gctcctcaag  
300  
gaccaggagc cgggggcctt catcatccgc gacagtcact ccttccgagg cgcgtacggg  
360  
ctggccatga aggtgtcttc gccacctcca accatcatgc agcagaataa aaaaggagac  
420  
atgacccatg agctggtcag gcattttctg atagagactg gcccagagg agtcaagctc  
480  
aagggtgcc ccaatgagcc aaacttcgga tcgctgtctg ccctggtcta ccagcactcc  
540  
atcatcccat tggccctgcc ttgcaagctg gtcattccaa accgagaccc cacagatgaa  
600  
tcgaaagata gctccggccc tgccaactca actgcagacc tgctgaaaca aggggcagcc  
660  
tgcaatgtgc tcttcatcaa ctctgtggac atggagtcac tcactgggccc acaggccatc  
720  
tctaaagcca catctgagac gttggctgca gacccacgc cagctgccac catcgttcac  
780  
ttcaaagtct ctgcccagg aatcactctg actgacaacc agagaaagct ctttttcaga  
840  
cgccactacc ctctcaacac tgtcaccttc tgtgacctgg atccacagga aagaaagtgg  
900  
atgaaaacag aggggtggtg ccctgctaag ctcttcggct tcgtggcccg gaagcagggc  
960  
agcaccacgg acaacgcctg ccacctctt gctgagcttg accccaacca gccggcctct  
1020  
gccatcgtca acttcgtctc caaggtcatg ctgaatgccg gccaaaagag atgaaccctg  
1080  
ccccttgccc agggccagtg ccatggggaa ggggcttgtg gggaggggac ccatgaatcc  
1140  
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1200  
caacgtgggg agagggaagt gaattgcaga ggggaggggg aaaagagaga gagagagaga  
1260  
gagagagaga gagagagaga gagaagatg gaggagaaga acttggattc ccctgggtag  
1320  
atggaaactg caaaaacca aagcctccaa aactaaccag gtccaccta caccctctcc  
1380  
ctcccctaag aagatggatg tcctcaaaag agaaggaaca aacctccttg ggaatccaca  
1440  
ttttttgggg gaatggaaaa gctctgtctc cctaactcaa ctgctttgca aggggaaatc  
1500  
aagctgggag aatcttttct tggccacctg tggggtagggt tgtcaaacca aacagagcca  
1560  
ccgtgggaca tcaagtggaa gaacttggtt gcttgaaagt atctcagacc caaggcacct  
1620  
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1680  
ctcacacatt gatctagatc tgcctttatc cactcgaatt ataaacagct cggcttgtcc  
1740  
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1800  
agtgcagcag gggagggaca aacaaccaag ctatgggtga cagaggctct ctctggtgc  
1860

ctgcacctgc actctagtga ccctgggtgc cgccagaccc ttctcttcta caaagacccc  
1920  
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1980  
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2040  
agctgttgag ctcggggtgt cttccccaag gcatgtggct cagcagcaag aaaggcaagt  
2100  
tgctcctgct ggggccctgg actctgcctt agctcccacc tctcagcctt gttattgggt  
2160  
ttcatgcccc tggaccagcc ttatctcaga cctgcttacc tgcattgatc ctttttgggg  
2220  
gctggggatt gactcttctg gctctgcccc gccctgttct attctgcagg gtcctctgtg  
2280  
tggaattctc cctggggaac ctactttctg ctcatgtagg ctccggccag aaacctggag  
2340  
tccttatact cccctctgta agtggttttag ggtctggctt ttgcaggcac cctctgacct  
2400  
cagcagagct cctgggcctg ctgcctgcac accacatcgc ctacctaca tgccaaagcc  
2460  
tcactgtcac cctttctgcc ttgggtttccc tagctgagcc acgctgcccc tgcagcagag  
2520  
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2580  
ctgaccacca ttaaggact ctaagccaga atggaaaatt caccaggact ccattcttaa  
2640  
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2700  
acatgagaca tactgacaga atctgtaagc taataaaatg taagaaaagg ttaaaaaaag  
2760  
aataggtaaa ttgacaagaa gtattttattg tttttccata ttgctttatt gccttccttg  
2820  
gggataaacc aattcctatc cttttttata tgtgtaagta aagcctgaag tg  
2872

&lt;210&gt; 2800

&lt;211&gt; 294

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2800

Met	Ser	Pro	Phe	Leu	Phe	Cys	Cys	Met	Met	Val	Gly	Gly	Gly	Glu	Asp
1				5				10						15	
Thr	Phe	Met	Ala	Ser	Pro	Tyr	Lys	Pro	Glu	Ile	Ser	Arg	Glu	Gln	Ala
			20					25					30		
Ile	Ala	Leu	Leu	Lys	Asp	Gln	Glu	Pro	Gly	Ala	Phe	Ile	Ile	Arg	Asp
		35				40					45				
Ser	His	Ser	Phe	Arg	Gly	Ala	Tyr	Gly	Leu	Ala	Met	Lys	Val	Ser	Ser
	50				55					60					
Pro	Pro	Pro	Thr	Ile	Met	Gln	Gln	Asn	Lys	Lys	Gly	Asp	Met	Thr	His
65				70						75				80	
Glu	Leu	Val	Arg	His	Phe	Leu	Ile	Glu	Thr	Gly	Pro	Arg	Gly	Val	Lys
			85					90					95		
Leu	Lys	Gly	Cys	Pro	Asn	Glu	Pro	Asn	Phe	Gly	Ser	Leu	Ser	Ala	Leu

100 105 110  
Val Tyr Gln His Ser Ile Ile Pro Leu Ala Leu Pro Cys Lys Leu Val  
115 120 125  
Ile Pro Asn Arg Asp Pro Thr Asp Glu Ser Lys Asp Ser Ser Gly Pro  
130 135 140  
Ala Asn Ser Thr Ala Asp Leu Leu Lys Gln Gly Ala Ala Cys Asn Val  
145 150 155 160  
Leu Phe Ile Asn Ser Val Asp Met Glu Ser Leu Thr Gly Pro Gln Ala  
165 170 175  
Ile Ser Lys Ala Thr Ser Glu Thr Leu Ala Ala Asp Pro Thr Pro Ala  
180 185 190  
Ala Thr Ile Val His Phe Lys Val Ser Ala Gln Gly Ile Thr Leu Thr  
195 200 205  
Asp Asn Gln Arg Lys Leu Phe Phe Arg Arg His Tyr Pro Leu Asn Thr  
210 215 220  
Val Thr Phe Cys Asp Leu Asp Pro Gln Glu Arg Lys Trp Met Lys Thr  
225 230 235 240  
Glu Gly Gly Ala Pro Ala Lys Leu Phe Gly Phe Val Ala Arg Lys Gln  
245 250 255  
Gly Ser Thr Thr Asp Asn Ala Cys His Leu Phe Ala Glu Leu Asp Pro  
260 265 270  
Asn Gln Pro Ala Ser Ala Ile Val Asn Phe Val Ser Lys Val Met Leu  
275 280 285  
Asn Ala Gly Gln Lys Arg  
290

&lt;210&gt; 2801

&lt;211&gt; 549

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2801

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60  
cagggggccc gggccgctgc gtgttgtcca cccaagatgg agttcctcct ggggaacccg  
120  
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180  
gattggacgt tgaatatgga gatctgtgac atcatcaatg agacggagga agggccaaag  
240  
gatgccattc gagccctgaa gaagcggctc aacgggaacc ggaactacag agaggtgatg  
300  
ctggcattaa cagtgtgga gacatgtgtg aagaactgtg gccaccgctt ccacatcctt  
360  
gtggccaacc gagatttcat cgacagtgtt ctgggtcaaaa ttatatctcc caagaacaac  
420  
cctcccacca ttgtacagga caaagtgtt gctctgatcc aggcattggc tgatgccttt  
480  
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540  
gttgaattc  
549

&lt;210&gt; 2802



<211> 151  
<212> PRT  
<213> Homo sapiens

<400> 2802  
Met Glu Phe Leu Leu Gly Asn Pro Phe Ser Thr Pro Val Gly Gln Cys  
1 5 10 15  
Leu Glu Lys Ala Thr Asp Gly Ser Leu Gln Ser Glu Asp Trp Thr Leu  
20 25 30  
Asn Met Glu Ile Cys Asp Ile Ile Asn Glu Thr Glu Glu Gly Pro Lys  
35 40 45  
Asp Ala Ile Arg Ala Leu Lys Lys Arg Leu Asn Gly Asn Arg Asn Tyr  
50 55 60  
Arg Glu Val Met Leu Ala Leu Thr Val Leu Glu Thr Cys Val Lys Asn  
65 70 75 80  
Cys Gly His Arg Phe His Ile Leu Val Ala Asn Arg Asp Phe Ile Asp  
85 90 95  
Ser Val Leu Val Lys Ile Ile Ser Pro Lys Asn Asn Pro Pro Thr Ile  
100 105 110  
Val Gln Asp Lys Val Leu Ala Leu Ile Gln Ala Trp Ala Asp Ala Phe  
115 120 125  
Arg Ser Ser Pro Asp Leu Thr Gly Val Val His Ile Tyr Glu Glu Leu  
130 135 140  
Lys Arg Lys Gly Val Glu Phe  
145 150

<210> 2803  
<211> 459  
<212> DNA  
<213> Homo sapiens

<400> 2803  
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tggccccccac caccggagg agcagctcct gccctgtcc gggggatgac tgattctcct  
120  
ccgccagccg tagggtgtgt gctgtccggg ctcacgggga ccctgtctcc gagtcgttcg  
180  
tgcagcgtgt gtaccagccc ttcctcacca cctgcgacgg gcaccgggccc tgcagcacct  
240  
accgcaatat gccagccgcc atgccggaac ggaggagagct gtgtccagcc tggccgctgc  
300  
cgctgccctg caggatggcg gggtagacct tgccagtcag atgtggacna gtgcaatgaa  
360  
ggaagaagtg cagaggctgc agtccagggt ggacctgctg gaggagaagc tgcagctggt  
420  
actggccccca ctgcacagcc tggcctcgca ggcactgga  
459

<210> 2804  
<211> 153  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 2804

Xaa Met Ala Thr Pro Gly Leu Gln Gln His Gln Gln Pro Pro Gly Pro  
 1 5 10 15  
 Gly Arg His Arg Trp Pro Pro Pro Pro Gly Gly Ala Ala Pro Ala Pro  
 20 25 30  
 Val Arg Gly Met Thr Asp Ser Pro Pro Pro Ala Val Gly Cys Val Leu  
 35 40 45  
 Ser Gly Leu Thr Gly Thr Leu Ser Pro Ser Arg Ser Cys Ser Val Cys  
 50 55 60  
 Thr Ser Pro Ser Ser Pro Pro Ala Thr Gly Thr Gly Pro Ala Ala Pro  
 65 70 75 80  
 Thr Ala Ile Cys Gln Pro Pro Cys Arg Asn Gly Gly Ser Cys Val Gln  
 85 90 95  
 Pro Gly Arg Cys Arg Cys Pro Ala Gly Trp Arg Gly Asp Thr Cys Gln  
 100 105 110  
 Ser Asp Val Asp Xaa Cys Asn Glu Gly Arg Ser Ala Glu Ala Ala Val  
 115 120 125  
 Gln Gly Gly Pro Ala Gly Gly Glu Ala Ala Ala Gly Thr Gly Pro Thr  
 130 135 140  
 Ala Gln Pro Gly Leu Ala Gly Thr Gly  
 145 150

&lt;210&gt; 2805

&lt;211&gt; 771

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2805

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 60  
 aagttaatac agacctgctc acatttcaga atagagaaga ttgagaggat ccagaatcca  
 120  
 gatctctgga atagctacca ggcaaagaaa aaaactatgg atgccaagaa tggccagaca  
 180  
 atgaatgaga agcaactctt ccatgggaca gatgccggct ccgtgccaca cgtcaatcga  
 240  
 aatggcttta accgcagcta tgccggaaag aatgctgtgg catatggaaa gggaacctat  
 300  
 ttgctgtca atgccaatta ttctgccaat gatacgtact ccagaccaga tgcaaatggg  
 360  
 agaaagcatg tgtattatgt gcgagtactt actggaatct atacacatgg aaatcattca  
 420  
 ttaattgtgc ctcttcaaa gaacctcaa aatcctactg acctgtatga cactgtcaca  
 480  
 gataatgtgc accatccaag tttatttgtg gcattttatg actaccaagc ataccagag  
 540  
 taccttatta cgtttagaaa ataacacttt ggtatccttc ccacaaaatt attctccatt  
 600  
 tgtacatata tagttgtaaa acaagtttta gctttttttt ttaattcctc ttaacagatt  
 660  
 tttctaatat ccaaggatca ttctttgtcg ctgcagtcag atctttcttc agcttctctt  
 720  
 tcataatgga aatgaactta ttatcttgag agccaaataa cttggaaatt t  
 771

<210> 2806  
 <211> 187  
 <212> PRT  
 <213> Homo sapiens

<400> 2806  
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 Thr Val Ala Ser Lys Phe Asn Gln Thr Cys Ser His Phe Arg Ile Glu  
 20 25 30  
 Lys Ile Glu Arg Ile Gln Asn Pro Asp Leu Trp Asn Ser Tyr Gln Ala  
 35 40 45  
 Lys Lys Lys Thr Met Asp Ala Lys Asn Gly Gln Thr Met Asn Glu Lys  
 50 55 60  
 Gln Leu Phe His Gly Thr Asp Ala Gly Ser Val Pro His Val Asn Arg  
 65 70 75 80  
 Asn Gly Phe Asn Arg Ser Tyr Ala Gly Lys Asn Ala Val Ala Tyr Gly  
 85 90 95  
 Lys Gly Thr Tyr Phe Ala Val Asn Ala Asn Tyr Ser Ala Asn Asp Thr  
 100 105 110  
 Tyr Ser Arg Pro Asp Ala Asn Gly Arg Lys His Val Tyr Tyr Val Arg  
 115 120 125  
 Val Leu Thr Gly Ile Tyr Thr His Gly Asn His Ser Leu Ile Val Pro  
 130 135 140  
 Pro Ser Lys Asn Pro Gln Asn Pro Thr Asp Leu Tyr Asp Thr Val Thr  
 145 150 155 160  
 Asp Asn Val His His Pro Ser Leu Phe Val Ala Phe Tyr Asp Tyr Gln  
 165 170 175  
 Ala Tyr Pro Glu Tyr Leu Ile Thr Phe Arg Lys  
 180 185

<210> 2807  
 <211> 1660  
 <212> DNA  
 <213> Homo sapiens

<400> 2807  
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 caccatcacc ccacagcgag caagtctttt gttccctcag ctcttgcgac aaagtcagaa  
 120  
 cccagggtgct cagggccgccc tgtgaatgca ggtgccttgt cccaaacaga ggacatatta  
 180  
 atagggccat gatttcctgt tgccacaatt ttgccaaggc aggctggcac cagaacacca  
 240  
 aagaagggaa attatagtgg agtagcagtt tgtgaatctg gagtccttgg ttcaatcaca  
 300  
 gaacaagtag ggagaggagc caggacctag gccttcaggt tttcagcaag gaaggactct  
 360  
 caggccatcc ttgcagttca gttaacagga ggaagcaagg atccccagag agctggagta  
 420  
 ctctgactct cggatagaaa ggcaggacaa tcggagcctg gggttcacgt gagtcaggaa  
 480

aggagctct ccacactgga atcgctgtag ccgaggaggt tctaattgga cgatcttcga  
540  
cggtttcctt tccagctcaa aagaaagcac aataggacgg aggacagagg ggctagtaca  
600  
aagtgtccag aggaacatgg tcatgggctc gtcaaccctg gctgaagact caagttgggc  
660  
tccaggccct gcaaactgca agaccactct gcctggcact tggacgaaat ctaggaggga  
720  
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780  
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840  
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900  
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960  
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1020  
aacgctgatg gtggtctcag ggggaaaact caggacctgc acataagtgg atgaccggaa  
1080  
acaacaataa acattgtgag atctggaaac ctttttctcc aactggctga agtggacccg  
1140  
ggctcctgga agtagtccta gtgagggagg caagtgtggg tcttctatat atacatccag  
1200  
gtgagggggg aattcacatt cagcagtctc aagagcgact gttagcttca cacaccttct  
1260  
catggccccc gtgttcccca gtttcatcca gagagacgcc acaaggggtt cacatagtgt  
1320  
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1380  
gtcggtcagt gaggattcag gcaatgactt gtttgcattc agcacatctt ggatatcctg  
1440  
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1500  
caactccaga ggacgccgag atatgcagga tgaaccatcc ttttcaaaca acattggtgt  
1560  
agcggggcca ggagctacga gtcggtacac ctgtcccggg tgcaagaact caaaccagcg  
1620  
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1660

&lt;210&gt; 2808

&lt;211&gt; 390

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2808

Met	Leu	Phe	Glu	Lys	Asp	Gly	Ser	Ser	Cys	Ile	Ser	Arg	Arg	Pro	Leu
1				5					10					15	
Glu	Leu	Ala	Gly	Cys	Ala	Ser	Cys	Leu	Thr	Val	Gln	Asp	Asn	Trp	Thr
			20					25					30		
Leu	Glu	Leu	Glu	Ser	Ser	Gln	Asp	Ile	Gln	Asp	Val	Leu	Asp	Ala	Asn
		35					40					45			
Lys	Ser	Leu	Pro	Glu	Ser	Ser	Leu	Thr	Asp	Leu	Leu	Ser	Asp	Asn	Phe

50	55	60
Thr Asp Ser Leu Val Ser Phe Ser Ala Glu Ile Leu Ser Arg Thr Leu		
65	70	75
Cys Glu Pro Leu Val Ala Ser Leu Trp Met Lys Leu Gly Asn Thr Gly		80
	85	90
Ala Met Arg Arg Cys Val Lys Leu Thr Val Ala Leu Glu Thr Ala Glu		95
	100	105
Cys Glu Phe Pro Pro His Leu Asp Val Tyr Ile Glu Asp Pro His Leu		110
	115	120
Pro Pro Ser Leu Gly Leu Leu Pro Gly Ala Arg Val His Phe Ser Gln		125
	130	135
Leu Glu Lys Arg Val Ser Arg Ser His Asn Val Tyr Cys Cys Phe Arg		140
145	150	155
Ser Ser Thr Tyr Val Gln Val Leu Ser Phe Pro Pro Glu Thr Thr Ile		160
	165	170
Ser Val Pro Leu Pro His Ile Tyr Leu Ala Glu Leu Leu Gln Gly Gly		175
	180	185
Gln Ser Pro Phe Gln Ala Thr Ala Ser Cys His Ile Val Ser Val Phe		190
	195	200
Ser Leu Gln Leu Phe Trp Val Cys Ala Tyr Cys Thr Ser Ile Cys Arg		205
	210	215
Gln Gly Lys Cys Thr Arg Leu Gly Ser Thr Cys Pro Thr Gln Thr Ala		220
225	230	235
Ile Ser Gln Ala Ile Ile Arg Leu Leu Val Glu Asp Gly Thr Ala Glu		240
	245	250
Ala Val Val Thr Cys Arg Asn His His Val Ala Ala Ala Leu Gly Leu		255
	260	265
Cys Pro Arg Glu Trp Ala Ser Leu Leu Asp Phe Val Gln Val Pro Gly		270
	275	280
Arg Val Val Leu Gln Phe Ala Gly Pro Gly Ala Gln Leu Glu Ser Ser		285
	290	295
Ala Arg Val Asp Glu Pro Met Thr Met Phe Leu Trp Thr Leu Cys Thr		300
305	310	315
Ser Pro Ser Val Leu Arg Pro Ile Val Leu Ser Phe Glu Leu Glu Arg		320
	325	330
Lys Pro Ser Lys Ile Val Pro Leu Glu Pro Pro Arg Leu Gln Arg Phe		335
	340	345
Gln Cys Gly Glu Leu Pro Phe Leu Thr His Val Asn Pro Arg Leu Arg		350
	355	360
Leu Ser Cys Leu Ser Ile Arg Glu Ser Glu Tyr Ser Ser Ser Leu Gly		365
	370	375
Ile Leu Ala Ser Ser Cys		380
385	390	

&lt;210&gt; 2809

&lt;211&gt; 1502

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2809

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60

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&lt;210&gt; 2810

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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20 25 30  
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35 40 45  
Val Cys Ala Ser Val Cys Met Cys Ala Arg Ala Xaa Val Cys Val Cys  
50 55 60  
Thr Cys Val Xaa Leu Cys Thr Arg Val Cys Val Cys Val His Ala Cys  
65 70 75 80  
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Phe Gly Thr Arg Trp Phe  
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<210> 2811  
<211> 591  
<212> DNA  
<213> Homo sapiens

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480  
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591

<210> 2812  
<211> 131  
<212> PRT  
<213> Homo sapiens

<400> 2812  
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20 25 30  
Pro Ala Pro Ala Val Asp Glu Pro Gln Pro Xaa Ser Gln Ala Pro Pro

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      50      55      60
Arg Pro Arg Pro Gly Glu Gly Asp Pro Val Thr Arg Glu Arg Ser Pro
65      70      75      80
Val Pro Gly Ala Thr Glu Met Pro Pro Pro Arg Pro Lys Val Pro Ala
      85      90      95
Pro Pro Gly Pro Thr Gly Arg Ser Pro Arg Ala Ala Val Gly His His
      100      105      110
Arg Ala Ala Gly Pro Pro Gly Cys Val Gly Pro Ser Leu Ser Gly Gln
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Leu Gly Ser
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<210> 2813  
 <211> 2417  
 <212> DNA  
 <213> Homo sapiens

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1020

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1980  
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2400  
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2417

&lt;210&gt; 2814

&lt;211&gt; 471

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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Trp Lys Glu Leu Ser Leu Lys Tyr Lys Gln Ser Phe Gln Glu Ala Arg  
35 40 45  
Asp Glu Leu Val Glu Phe Gln Glu Gly Ser Arg Glu Leu Glu Ala Glu  
50 55 60  
Leu Glu Ala Gln Leu Val Gln Ala Glu Gln Arg Asn Arg Asp Leu Gln  
65 70 75 80  
Ala Asp Asn Gln Arg Leu Lys Tyr Glu Val Glu Ala Leu Lys Glu Lys  
85 90 95  
Leu Glu His Gln Tyr Ala Gln Ser Tyr Lys Gln Val Ser Val Leu Glu  
100 105 110  
Asp Asp Leu Ser Gln Thr Arg Ala Ile Lys Glu Gln Leu His Lys Tyr  
115 120 125  
Val Arg Glu Leu Glu Gln Ala Asn Asp Asp Leu Glu Arg Ala Lys Arg  
130 135 140  
Ala Thr Ile Val Ser Leu Glu Thr Leu Asn Lys Leu Asn Gln Ala Ile  
145 150 155 160  
Glu Arg Asn Ala Phe Leu Glu Ser Glu Leu Asp Glu Lys Glu Ser Leu  
165 170 175  
Leu Val Ser Val Gln Arg Leu Lys Asp Glu Ala Arg Asp Leu Arg Gln  
180 185 190  
Glu Leu Ala Val Arg Glu Arg Gln Gln Glu Val Thr Arg Lys Ser Ala  
195 200 205  
Pro Ser Ser Pro Thr Leu Asp Cys Glu Lys Met Asp Ser Ala Val Gln  
210 215 220  
Ala Ser Leu Ser Leu Pro Ala Thr Pro Val Gly Lys Gly Thr Glu Asn  
225 230 235 240  
Thr Phe Pro Ser Pro Lys Ala Ile Pro Asn Gly Phe Gly Thr Ser Pro  
245 250 255  
Leu Thr Pro Ser Ala Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu  
260 265 270  
Leu Arg Lys Val Gly Ala Leu Glu Ser Lys Leu Ala Ala Cys Arg Asn  
275 280 285  
Phe Ala Lys Asp Gln Ala Ser Arg Lys Ser Tyr Ile Ser Gly Asn Val  
290 295 300  
Asn Cys Gly Val Leu Asn Gly Asn Gly Thr Lys Phe Ser Arg Ser Gly  
305 310 315 320  
His Thr Ser Phe Phe Asp Lys Gly Ala Val Asn Gly Phe Asp Pro Ala  
325 330 335  
Pro Pro Pro Pro Gly Leu Gly Ser Ser Arg Pro Ser Ser Ala Pro Gly  
340 345 350  
Met Cys Leu Ser Val Cys Glu Cys Leu Ala Ser Arg Gly Ala Pro Ala  
355 360 365  
Leu Leu Gln Gln Pro Arg Thr Pro Thr Pro His Pro Ser Val Pro Gly  
370 375 380  
Pro Ser Pro Val Pro Leu Arg Leu Pro Pro His Gly Trp Gln Arg Ala  
385 390 395 400  
Gly Cys Met Gln Trp Arg Leu Leu Gly Pro Ala Gln Pro Arg Asn Ser  
405 410 415  
Ala Arg Tyr Gln Tyr Trp Leu Phe Ser Leu Leu Ala Val Val Pro Leu

420 425 430  
Val Ser His Asp Cys Thr Phe Val Gly Arg Lys Val Ile His Thr Cys  
435 440 445  
Ile Thr Trp Ser Leu Asp Ala Glu Val Pro Ile His His Thr Cys Pro  
450 455 460  
Ile Ala Pro Thr Leu Leu Tyr  
465 470

<210> 2815  
<211> 1421  
<212> DNA  
<213> Homo sapiens

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1421

<210> 2816

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2816

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			20					25					30		
Val	Arg	Ala	His	Gly	Asp	Pro	Val	Ser	Glu	Ser	Phe	Val	Gln	Arg	Val
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Tyr	Gln	Pro	Phe	Leu	Thr	Thr	Cys	Asp	Gly	His	Arg	Ala	Cys	Ser	Thr
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Tyr	Arg	Thr	Ile	Tyr	Arg	Thr	Ala	Tyr	Arg	Arg	Ser	Pro	Gly	Leu	Ala
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Pro	Ala	Arg	Pro	Arg	Tyr	Ala	Cys	Cys	Pro	Gly	Trp	Lys	Arg	Thr	Ser
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Gly	Leu	Pro	Gly	Ala	Cys	Gly	Ala	Ala	Ile	Cys	Gln	Pro	Pro	Cys	Arg
			100					105					110		
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Trp	Arg	Gly	Asp	Thr	Cys	Gln	Ser	Asp	Val	Asp	Glu	Cys	Ser	Ala	Arg
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Arg	Gly	Gly	Cys	Pro	Gln	Arg	Cys	Val	Asn	Thr	Ala	Gly	Ser	Tyr	Trp
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Val	Pro	Lys	Gly	Gly	Pro	Pro	Arg	Val	Ala	Pro	Asn	Pro	Thr	Gly	Val
			180					185					190		
Asp	Ser	Ala	Met	Lys	Glu	Glu	Val	Gln	Arg	Leu	Gln	Ser	Arg	Val	Asp
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Ala	Ser	Gln	Ala	Gly	Ala	Trp	Ala	Pro	Gly	Pro	Arg	Gln	Pro	Pro	Gly
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Ala	Leu	Leu	Pro	Ala	Ala	Arg	Pro	His	Arg	Leu	Pro	Glu	Arg	Ala	Asp
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Phe	Leu	Pro	Gly	Gly	Ala	Ala	Gly	Val	Leu	Leu	Leu	Gln	Glu	Arg	Leu
		260						265					270		
Xaa	Asp	Cys	Pro	Ala	Pro	Gln	Ala	Gly	Leu	Ser	Pro	Ser	Arg	Arg	Pro
	275						280					285			
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	290					295					300				
Arg	Gly	Asp													

305

<210> 2817  
<211> 219  
<212> DNA  
<213> Homo sapiens

<400> 2817  
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219

<210> 2818  
<211> 73  
<212> PRT  
<213> Homo sapiens

<400> 2818  
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20 25 30  
Pro Gly Ala Ser Leu Gly Pro Gly Val Leu Leu Arg Ala Glu Phe His  
35 40 45  
Gln His Gln His Thr His Gln His Thr His Gln His Thr His Gln His  
50 55 60  
Gln His Thr Phe Ala Pro Phe Thr Arg  
65 70

<210> 2819  
<211> 730  
<212> DNA  
<213> Homo sapiens

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240  
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420

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<210> 2820  
<211> 195  
<212> PRT  
<213> Homo sapiens

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Ser Ala Gly Ala Arg Gly His Thr Gly Pro Lys Gly Gln Lys Gly Ser  
35 40 45  
Met Gly Ala Pro Gly Glu Arg Cys Lys Ser His Tyr Ala Ala Phe Ser  
50 55 60  
Val Gly Arg Glu Ala His Ala Gln Gln Pro Leu Leu Pro Asp Val Ile  
65 70 75 80  
Phe Asp Thr Glu Phe Val Asn Leu Tyr Asp His Phe Asn Met Phe Thr  
85 90 95  
Gly Lys Phe Tyr Cys Tyr Val Pro Gly Leu Tyr Phe Phe Ser Leu Asn  
100 105 110  
Val His Thr Trp Asn Gln Lys Glu Thr Tyr Leu His Ile Met Lys Asn  
115 120 125  
Glu Glu Glu Val Val Ile Leu Phe Ala Gln Val Gly Asp Arg Ser Ile  
130 135 140  
Met Gln Ser Gln Ser Leu Met Leu Glu Leu Arg Glu Gln Asp Gln Val  
145 150 155 160  
Trp Val Arg Leu Tyr Lys Gly Glu Arg Glu Asn Ala Ile Phe Ser Glu  
165 170 175  
Glu Leu Asp Thr Tyr Ile Thr Phe Ser Gly Tyr Leu Val Lys His Ala  
180 185 190  
Thr Glu Pro  
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<210> 2821  
<211> 1746  
<212> DNA  
<213> Homo sapiens

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420  
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720  
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1620  
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1740

cctagg

1746

<210> 2822

<211> 424

<212> PRT

<213> Homo sapiens

<400> 2822

Met Ala Gln Leu Gln Thr Arg Phe Tyr Thr Asp Asn Lys Lys Tyr Ala  
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20 25 30  
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35 40 45  
Lys His Val Glu Phe Asp Phe Leu Ile Lys Gly Gln Phe Leu Arg Met  
50 55 60  
Pro Leu Asp Lys His Met Glu Met Glu Asp Ile Ser Ser Glu Glu Val  
65 70 75 80  
Val Glu Ile Glu Tyr Val Glu Lys Tyr Thr Ala Pro Gln Pro Glu Gln  
85 90 95  
Cys Met Phe His Asp Asp Trp Ile Ser Ser Ile Lys Gly Ala Glu Glu  
100 105 110  
Trp Ile Leu Thr Gly Ser Tyr Gly Lys Thr Ser Arg Ile Trp Ser Leu  
115 120 125  
Glu Gly Lys Ser Ile Met Thr Ile Val Gly His Thr Asp Val Val Lys  
130 135 140  
Asp Val Ala Trp Val Lys Lys Asp Ser Leu Ser Cys Leu Leu Xaa Glu  
145 150 155 160  
Cys Phe Tyr Gly Ser Asp Tyr Ser Leu Met Gly Val Glu Cys Arg Glu  
165 170 175  
Lys Gln Ser Glu Ser Pro Thr Leu Leu Xaa Arg Gly His Ala Gly Ser  
180 185 190  
Val Asp Ser Ile Ala Val Asp Gly Ser Gly Thr Lys Phe Cys Ser Gly  
195 200 205  
Ser Trp Asp Lys Met Leu Lys Ile Trp Ser Thr Val Pro Thr Asp Glu  
210 215 220  
Glu Asp Glu Met Glu Glu Ser Thr Asn Arg Pro Arg Lys Lys Gln Lys  
225 230 235 240  
Thr Glu Gln Leu Gly Leu Thr Arg Thr Pro Ile Val Thr Leu Ser Gly  
245 250 255  
His Met Glu Ala Val Ser Ser Val Leu Trp Ser Asp Ala Glu Glu Ile  
260 265 270  
Cys Ser Ala Ser Trp Asp His Thr Ile Arg Val Trp Asp Val Glu Ser  
275 280 285  
Gly Ser Leu Lys Ser Thr Leu Thr Gly Asn Lys Val Phe Asn Cys Ile  
290 295 300  
Ser Tyr Ser Pro Leu Cys Lys Arg Leu Ala Ser Gly Ser Thr Asp Arg  
305 310 315 320  
His Ile Arg Leu Trp Asp Pro Arg Thr Lys Asp Gly Ser Leu Val Ser  
325 330 335  
Leu Ser Leu Thr Ser His Thr Gly Trp Val Thr Ser Val Lys Trp Ser



```

          340          345          350
Pro Thr His Glu Gln Gln Leu Ile Ser Gly Ser Leu Asp Asn Ile Val
          355          360          365
Lys Leu Trp Asp Thr Arg Ser Cys Lys Ala Pro Leu Tyr Asp Leu Ala
          370          375          380
Ala His Glu Asp Lys Val Leu Ser Val Asp Trp Thr Asp Thr Gly Leu
385          390          395          400
Leu Leu Ser Gly Gly Ala Asp Asn Lys Leu Tyr Ser Tyr Arg Tyr Ser
          405          410          415
Pro Thr Thr Ser His Val Gly Ala
          420

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<210> 2823  
 <211> 461  
 <212> DNA  
 <213> Homo sapiens

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gttgtgtctg tcagtggggg aagggggcgg aaccctcatg ctgggggttcg ggtggacgtg
120
ggtgggtggt gaccctgtt gggaggcaga cacagtcaca ggcgtcgccc ttgggaaggg
180
cagccggaga agctggccct gtgtgggcct gggcctgtag ggtttcccag tggctttgcg
240
gagccagaga gctggatggc acctgggtcca gccaagcaaa gccccgaggg caggggctgg
300
atggggacac gcacatgtcc cttggccacg acaaaatggc agtgatgctg cttgccttcc
360
tgcagcatct gtgaggatca aatgcgtgca cctacgcaaa gcatccgcac atagcaagtg
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461

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<210> 2824  
 <211> 81  
 <212> PRT  
 <213> Homo sapiens

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<400> 2824
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1          5          10          15
Asp Gln Val Pro Ser Ser Ser Leu Ala Pro Gln Ser His Trp Glu Thr
          20          25          30
Leu Gln Ala Gln Ala His Thr Gly Pro Ala Ser Pro Ala Ala Leu Pro
          35          40          45
Lys Gly Asp Ala Cys Asp Cys Val Cys Leu Pro Thr Gly Val Thr Thr
          50          55          60
His Pro Arg Pro Pro Glu Pro Gln His Glu Gly Ser Ala Pro Phe Pro
65          70          75          80
His

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<210> 2825  
<211> 1520  
<212> DNA  
<213> Homo sapiens

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120  
gatggacatg tagaggtggc acgtttgctt ttggatagtg gtgctcaagt gaacatgcct  
180  
gcagattcat ttgaatctcc attgacgcta gctgcctgtg gaggacatgt tgaattggca  
240  
gctctactta ttgaaagggg agcaaatctt gaagaagtta atgatgaagg atacactccc  
300  
ttgatggaag cagctcgaga aggacatgaa gaaatggtgg cattacttct tagcacaagg  
360  
agcnaaatat caatgcacag acagaagaaa ctcaagaaac tgctcttgac tctggcttgc  
420  
tgtggaggct ttctggaagt ggcagacttt ctaattaagg caggagccga tatagaacta  
480  
gggtgttcta cccctttaat ggaagctgct caagagggtc atttggagtt agttaatac  
540  
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600  
tatgcctgtg aaaatggtca tactgatgta gcagatgtct tacttcaggc aggcgcagat  
660  
ttagacaagc aggaggacat gaagactatt ttggagggca tagatccggc caagcatctg  
720  
gaacatgaat ctgaaggtgg aagaactcct ttaatgaaag ctgcaagagc tggcatgtt  
780  
tgtactgttc agttcttaat tagtaaagga gcgaatgtga atagaaccac agctaataat  
840  
gaccatactg tactgtccct ggcttgtgca ggggggtcatc tggcagtggg ggaactactt  
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960  
gcagcaaaag gtggccatac aagtgttggt tgctatctct tggattatcc taataacttg  
1020  
ctttcagccc ctccaccaga tgtcactcag ttaactcccc catcccacga tttaaatagg  
1080  
gctcctcgtg taccagttca agcactgccc atgggtgttc cacctcagga gcctgacaaa  
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1200  
tccagcagcc atttgccagc aaacagccag gatgtacagg gttacatcac caatcagtct  
1260  
ccagagagca ttgtagaaga ggctcaggga aagttaacag aactggaaca gaggataaaa  
1320  
gaagccatag aaaagaatgc acagctgcag tccttggaac tggctcatgc tgaccaactt  
1380  
accaaggaga agatcgagga gctcaacaaa acaaggaggg aacaaattca gaagaaacaa  
1440

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1520

<210> 2826  
<211> 506  
<212> PRT  
<213> Homo sapiens

<400> 2826  
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Leu Leu Glu Ala Gly Ala Asp Gln Glu His Lys Thr Asp Glu Met His  
20 25 30  
Thr Ala Leu Met Glu Ala Cys Met Asp Gly His Val Glu Val Ala Arg  
35 40 45  
Leu Leu Leu Asp Ser Gly Ala Gln Val Asn Met Pro Ala Asp Ser Phe  
50 55 60  
Glu Ser Pro Leu Thr Leu Ala Ala Cys Gly Gly His Val Glu Leu Ala  
65 70 75 80  
Ala Leu Leu Ile Glu Arg Gly Ala Asn Leu Glu Glu Val Asn Asp Glu  
85 90 95  
Gly Tyr Thr Pro Leu Met Glu Ala Ala Arg Glu Gly His Glu Glu Met  
100 105 110  
Val Ala Leu Leu Leu Ser Thr Arg Ser Xaa Ile Ser Met His Arg Gln  
115 120 125  
Lys Lys Leu Lys Lys Leu Leu Leu Thr Leu Ala Cys Cys Gly Gly Phe  
130 135 140  
Leu Glu Val Ala Asp Phe Leu Ile Lys Ala Gly Ala Asp Ile Glu Leu  
145 150 155 160  
Gly Cys Ser Thr Pro Leu Met Glu Ala Ala Gln Glu Gly His Leu Glu  
165 170 175  
Leu Val Lys Tyr Leu Leu Ala Ala Gly Ala Asn Val His Ala Thr Thr  
180 185 190  
Ala Thr Gly Asp Thr Ala Leu Thr Tyr Ala Cys Glu Asn Gly His Thr  
195 200 205  
Asp Val Ala Asp Val Leu Leu Gln Ala Gly Ala Asp Leu Asp Lys Gln  
210 215 220  
Glu Asp Met Lys Thr Ile Leu Glu Gly Ile Asp Pro Ala Lys His Leu  
225 230 235 240  
Glu His Glu Ser Glu Gly Gly Arg Thr Pro Leu Met Lys Ala Ala Arg  
245 250 255  
Ala Gly His Val Cys Thr Val Gln Phe Leu Ile Ser Lys Gly Ala Asn  
260 265 270  
Val Asn Arg Thr Thr Ala Asn Asn Asp His Thr Val Leu Ser Leu Ala  
275 280 285  
Cys Ala Gly Gly His Leu Ala Val Val Glu Leu Leu Ala His Gly  
290 295 300  
Ala Asp Pro Thr His Arg Leu Lys Asp Gly Ser Thr Met Leu Ile Glu  
305 310 315 320  
Ala Ala Lys Gly Gly His Thr Ser Val Val Cys Tyr Leu Leu Asp Tyr  
325 330 335  
Pro Asn Asn Leu Leu Ser Ala Pro Pro Pro Asp Val Thr Gln Leu Thr

340 345 350  
Pro Pro Ser His Asp Leu Asn Arg Ala Pro Arg Val Pro Val Gln Ala  
355 360 365  
Leu Pro Met Val Val Pro Pro Gln Glu Pro Asp Lys Pro Pro Ala Asn  
370 375 380  
Val Ala Thr Thr Leu Pro Ile Arg Asn Lys Ala Ala Ser Lys Gln Lys  
385 390 395 400  
Ser Ser Ser His Leu Pro Ala Asn Ser Gln Asp Val Gln Gly Tyr Ile  
405 410 415  
Thr Asn Gln Ser Pro Glu Ser Ile Val Glu Glu Ala Gln Gly Lys Leu  
420 425 430  
Thr Glu Leu Glu Gln Arg Ile Lys Glu Ala Ile Glu Lys Asn Ala Gln  
435 440 445  
Leu Gln Ser Leu Glu Leu Ala His Ala Asp Gln Leu Thr Lys Glu Lys  
450 455 460  
Ile Glu Glu Leu Asn Lys Thr Arg Glu Glu Gln Ile Gln Lys Lys Gln  
465 470 475 480  
Lys Ile Leu Glu Glu Leu Gln Lys Val Glu Arg Glu Leu Gln Leu Lys  
485 490 495  
Thr Gln Gln Gln Leu Lys Lys Gln Tyr Leu  
500 505

&lt;210&gt; 2827

&lt;211&gt; 481

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2827

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120  
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180  
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240  
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360  
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c  
481

&lt;210&gt; 2828

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2828

Arg Glu Ala Ala Ala Ala Ala Gly Asp Ala Ser Glu Asp Ser Asp Ala

1 5 10 15  
Gly Ser Arg Ala Leu Pro Phe Leu Gly Gly Asn Arg Leu Ser Leu Asp  
20 25 30  
Leu Tyr Pro Gly Gly Cys Gln Gln Leu Leu His Leu Cys Val Gln Gln  
35 40 45  
Pro Leu Gln Leu Leu Gln Val Glu Phe Leu Arg Leu Asn Thr His Glu  
50 55 60  
Asp Pro Gln Leu Leu Glu Ala Thr Leu Ala Gln Leu Pro Gln Asn Leu  
65 70 75 80  
Ser Cys Leu Arg Ser Leu Val Leu Lys Arg Gly Gln Arg Arg Asp Thr  
85 90 95  
Leu Gly Ala Cys Leu Arg Gly Ala Leu Thr Asn Leu Pro Ala Gly Leu  
100 105 110  
Ser Gly Leu Ala His Leu Ala His Leu Asp Leu Ser Phe Asn Ser Leu  
115 120 125  
Glu Thr Leu Pro Ala Cys Val Leu Gln Met Arg Gly Leu Gly Ala Leu  
130 135 140  
Leu Leu Ser His Asn Cys Leu Ser Glu Leu Pro Glu Ala Leu Gly Ala  
145 150 155 160

&lt;210&gt; 2829

&lt;211&gt; 3648

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2829

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120  
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180  
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240  
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3600  
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3648

&lt;210&gt; 2830

&lt;211&gt; 668

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2830

Met	Val	Met	Glu	Phe	Pro	Asp	Asn	Val	Leu	Asn	Leu	Asp	Gly	His	Gln
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Asn	Asn	Gly	Ala	Gln	Leu	Lys	Gln	Phe	Ile	Gln	Arg	His	Gly	Met	Leu
			20					25					30		
Lys	Gln	Gln	Asp	Leu	Ser	Ile	Ala	Met	Val	Val	Thr	Ser	Arg	Glu	Val
		35					40					45			
Leu	Ser	Ala	Leu	Ser	Gln	Leu	Val	Pro	Cys	Val	Gly	Cys	Arg	Arg	Ser
	50				55						60				
Val	Glu	Arg	Leu	Phe	Ser	Gln	Leu	Val	Glu	Ser	Gly	Asn	Pro	Ala	Leu

65					70					75					80
Glu	Pro	Leu	Thr	Val	Gly	Pro	Lys	Gly	Val	Leu	Ser	Val	Thr	Arg	Ser
				85					90					95	
Cys	Met	Thr	Asp	Ala	Lys	Lys	Leu	Tyr	Thr	Leu	Phe	Tyr	Val	His	Gly
			100					105					110		
Ser	Lys	Leu	Asn	Asp	Met	Ile	Asp	Ala	Ile	Pro	Lys	Ser	Lys	Lys	Asn
		115				120						125			
Lys	Arg	Cys	Gln	Leu	His	Ser	Leu	Asp	Thr	His	Lys	Pro	Lys	Pro	Leu
	130					135					140				
Gly	Gly	Cys	Trp	Met	Asp	Val	Trp	Glu	Leu	Met	Ser	Gln	Glu	Cys	Arg
145				150					155					160	
Asp	Glu	Val	Val	Leu	Ile	Asp	Ser	Ser	Cys	Leu	Leu	Glu	Thr	Leu	Glu
			165					170						175	
Thr	Tyr	Leu	Arg	Lys	His	Arg	Phe	Cys	Thr	Asp	Cys	Lys	Asn	Lys	Val
		180					185						190		
Leu	Arg	Ala	Tyr	Asn	Ile	Leu	Ile	Gly	Glu	Leu	Asp	Cys	Ser	Lys	Glu
	195					200						205			
Lys	Gly	Tyr	Cys	Ala	Ala	Leu	Tyr	Glu	Gly	Leu	Arg	Cys	Cys	Pro	His
	210					215					220				
Glu	Arg	His	Ile	His	Val	Cys	Cys	Glu	Thr	Asp	Phe	Ile	Ala	His	Leu
225					230					235					240
Leu	Gly	Arg	Ala	Glu	Pro	Glu	Phe	Ala	Gly	Gly	Tyr	Glu	Arg	Arg	Glu
			245					250						255	
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Leu	Gly	Ile	His	Leu	Tyr	Glu	Arg	Leu	His	Arg	Ile	Trp	Gln	Lys	Leu
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Arg	Ala	Glu	Glu	Gln	Thr	Trp	Gln	Met	Leu	Phe	Tyr	Leu	Gly	Val	Asp
	290					295					300				
Ala	Leu	Arg	Lys	Ser	Phe	Glu	Met	Thr	Val	Glu	Lys	Val	Gln	Gly	Ile
305					310					315					320
Ser	Arg	Leu	Glu	Gln	Leu	Cys	Glu	Glu	Phe	Ser	Glu	Glu	Glu	Arg	Val
			325					330						335	
Arg	Glu	Leu	Lys	Gln	Glu	Lys	Lys	Arg	Gln	Lys	Arg	Lys	Asn	Arg	Arg
	340						345						350		
Lys	Asn	Lys	Cys	Val	Cys	Asp	Ile	Pro	Thr	Pro	Leu	Gln	Thr	Ala	Asp
	355					360						365			
Glu	Lys	Glu	Val	Ser	Gln	Glu	Lys	Glu	Thr	Asp	Phe	Ile	Glu	Asn	Ser
	370					375					380				
Ser	Cys	Lys	Ala	Cys	Gly	Ser	Thr	Glu	Asp	Gly	Asn	Thr	Cys	Val	Glu
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Val	Ile	Val	Thr	Asn	Glu	Asn	Thr	Ser	Cys	Thr	Cys	Pro	Ser	Ser	Gly
			405					410						415	
Asn	Leu	Leu	Gly	Ser	Pro	Lys	Ile	Lys	Lys	Gly	Leu	Ser	Pro	His	Cys
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Asn	Gly	Ser	Asp	Cys	Gly	Tyr	Ser	Ser	Ser	Met	Glu	Gly	Ser	Glu	Thr
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Gly	Ser	Arg	Glu	Gly	Ser	Asp	Val	Ala	Cys	Thr	Glu	Gly	Ile	Cys	Asn
	450					455					460				
His	Asp	Glu	His	Gly	Asp	Asp	Ser	Cys	Val	His	His	Cys	Glu	Asp	Lys
465					470					475					480
Glu	Asp	Asp	Gly	Asp	Ser	Cys	Val	Glu	Cys	Trp	Ala	Asn	Ser	Glu	Glu
			485					490						495	
Asn	Asp	Thr	Lys	Gly	Lys	Asn	Lys	Lys	Lys	Lys	Lys	Lys	Ser	Lys	Ile



500 505 510  
Leu Lys Cys Asp Glu His Ile Gln Lys Leu Gly Ser Cys Ile Thr Asp  
515 520 525  
Pro Gly Asn Arg Glu Thr Ser Gly Asn Thr Met His Thr Val Phe His  
530 535 540  
Arg Asp Lys Thr Lys Asp Thr His Pro Glu Ser Cys Cys Ser Ser Glu  
545 550 555 560  
Lys Gly Gly Gln Pro Leu Pro Trp Phe Glu His Arg Lys Asn Val Pro  
565 570 575  
Gln Phe Ala Glu Pro Thr Glu Thr Leu Phe Gly Pro Asp Ser Gly Lys  
580 585 590  
Gly Ala Lys Ser Leu Val Glu Leu Leu Asp Glu Ser Glu Cys Thr Ser  
595 600 605  
Asp Glu Glu Ile Phe Ile Ser Gln Asp Glu Ile Gln Ser Phe Met Ala  
610 615 620  
Asn Asn Gln Ser Phe Tyr Ser Asn Arg Glu Gln Tyr Arg Gln His Leu  
625 630 635 640  
Lys Glu Lys Phe Asn Lys Tyr Cys Arg Leu Asn Asp His Lys Arg Pro  
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&lt;210&gt; 2831

&lt;211&gt; 3986

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2831

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420  
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&lt;210&gt; 2832

&lt;211&gt; 611

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2832

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Ser Val Ile Phe Ser Gln Trp Gly Cys Gly Phe Ser Leu Cys Pro Gly  
20 25 30  
Gly Thr Arg Thr Ser Ser Gly Arg Leu Arg Arg Leu Gly Asp Ser Ser  
35 40 45  
Gly Pro Ala Leu Lys Arg Ser Phe Glu Val Glu Glu Val Glu Thr Pro  
50 55 60  
Asn Ser Thr Pro Pro Arg Arg Val Gln Thr Pro Leu Leu Arg Ala Thr  
65 70 75 80  
Val Ala Ser Ser Thr Gln Lys Phe Gln Asp Leu Gly Val Lys Asn Ser  
85 90 95  
Glu Pro Ser Ala Arg His Val Asp Ser Leu Ser Gln Arg Ser Pro Lys  
100 105 110  
Ala Ser Leu Arg Arg Val Glu Leu Ser Gly Pro Lys Ala Ala Glu Pro  
115 120 125  
Val Ser Arg Arg Thr Glu Leu Ser Ile Asp Ile Ser Ser Lys Gln Val  
130 135 140  
Glu Asn Ala Gly Ala Ile Gly Pro Ser Arg Phe Gly Leu Lys Arg Ala  
145 150 155 160  
Glu Val Leu Gly His Lys Thr Pro Glu Pro Ala Pro Arg Arg Thr Glu  
165 170 175  
Ile Thr Ile Val Lys Pro Gln Glu Ser Ala His Arg Arg Met Glu Pro  
180 185 190  
Pro Ala Ser Lys Val Pro Glu Val Pro Thr Ala Pro Ala Thr Asp Ala  
195 200 205  
Ala Pro Lys Arg Val Glu Ile Gln Met Pro Lys Pro Ala Glu Ala Pro  
210 215 220  
Thr Ala Pro Ser Pro Ala Gln Thr Leu Glu Asn Ser Glu Pro Ala Pro  
225 230 235 240  
Val Ser Gln Leu Gln Ser Arg Leu Glu Pro Lys Pro Gln Pro Pro Val  
245 250 255  
Ala Glu Ala Thr Pro Arg Ser Gln Glu Ala Thr Glu Ala Ala Pro Ser  
260 265 270  
Cys Val Gly Asp Met Ala Asp Thr Pro Arg Asp Ala Gly Leu Lys Gln  
275 280 285  
Ala Pro Ala Ser Arg Asn Glu Lys Ala Pro Val Asp Phe Gly Tyr Val  
290 295 300  
Gly Ile Asp Ser Ile Leu Glu Gln Met Arg Arg Lys Ala Met Lys Gln  
305 310 315 320  
Gly Phe Glu Phe Asn Ile Met Val Val Gly Gln Ser Gly Leu Gly Lys  
325 330 335  
Ser Thr Leu Ile Asn Thr Leu Phe Lys Ser Lys Ile Ser Arg Lys Ser  
340 345 350  
Val Gln Pro Thr Ser Glu Glu Arg Ile Pro Lys Thr Ile Glu Ile Lys  
355 360 365  
Ser Ile Thr His Asp Ile Glu Glu Lys Gly Val Arg Met Lys Leu Thr

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      370      375      380
Val Ile Asp Thr Pro Gly Phe Gly Asp His Ile Asn Asn Glu Asn Cys
385      390      395      400
Trp Gln Pro Ile Met Lys Phe Ile Asn Asp Gln Tyr Glu Lys Tyr Leu
      405      410      415
Gln Glu Glu Val Asn Ile Asn Arg Lys Lys Arg Ile Pro Asp Thr Arg
      420      425      430
Val His Cys Cys Leu Tyr Phe Ile Pro Ala Thr Gly His Ser Leu Arg
      435      440      445
Pro Leu Asp Ile Glu Phe Met Lys Arg Leu Ser Lys Val Val Asn Ile
      450      455      460
Val Pro Val Ile Ala Lys Ala Asp Thr Leu Thr Leu Glu Glu Arg Val
465      470      475      480
His Phe Lys Gln Arg Ile Thr Ala Asp Leu Leu Ser Asn Gly Ile Asp
      485      490      495
Val Tyr Pro Gln Lys Glu Phe Asp Glu Asp Ser Glu Asp Arg Leu Val
      500      505      510
Asn Glu Lys Phe Arg Glu Met Ile Pro Phe Ala Val Val Gly Ser Asp
      515      520      525
His Glu Tyr Gln Val Asn Gly Lys Arg Ile Leu Gly Arg Lys Thr Lys
530      535      540
Trp Gly Thr Ile Glu Val Glu Asn Thr Thr His Cys Glu Phe Ala Tyr
545      550      555      560
Leu Arg Asp Leu Leu Ile Arg Thr His Met Gln Asn Ile Lys Asp Ile
      565      570      575
Thr Ser Ser Ile His Phe Glu Ala Tyr Arg Val Lys Arg Leu Asn Glu
      580      585      590
Gly Ser Ser Ala Met Ala Asn Gly Val Glu Glu Lys Glu Pro Glu Ala
      595      600      605
Pro Glu Met
610

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&lt;210&gt; 2833

&lt;211&gt; 420

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2833

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120
ctccggctgc tcaggtcccc aacgctccgg ggccatggag gtgcttccgg ccggaatgtg
180
actactggga gtctcgggga gccgcagtgg ctgagggtag ccaccggggg gcgccctgga
240
acatcgccgg ccttggtctc cggacgtggg gcagccaccg gggggcgcca gggaggacgc
300
ttcgatacca aatgcctcgc ggctgccact tggggacgcc ttcctggtcc cgaagaaaca
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420

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&lt;210&gt; 2834

<211> 117  
<212> PRT  
<213> Homo sapiens

<400> 2834  
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Leu Leu Arg Leu Leu Arg Ser Pro Thr Leu Arg Gly His Gly Gly Ala  
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Ser Gly Arg Asn Val Thr Thr Gly Ser Leu Gly Glu Pro Gln Trp Leu  
35 40 45  
Arg Val Ala Thr Gly Gly Arg Pro Gly Thr Ser Pro Ala Leu Phe Ser  
50 55 60  
Gly Arg Gly Ala Ala Thr Gly Gly Arg Gln Gly Gly Arg Phe Asp Thr  
65 70 75 80  
Lys Cys Leu Ala Ala Ala Thr Trp Gly Arg Leu Pro Gly Pro Glu Glu  
85 90 95  
Thr Leu Pro Gly Gln Asp Ser Trp Asn Gly Val Pro Ser Arg Ala Gly  
100 105 110  
Leu Gly Met Cys Ala  
115

<210> 2835  
<211> 938  
<212> DNA  
<213> Homo sapiens

<400> 2835  
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120  
tgagtgggtt actgctgcgg gcaactggga ctccatcctg ctgggcatcc tctgagagtt  
180  
tatgtagaat acacttcaga attgtcctgc tcaaggacaa tgaagctgag gtcctgctcc  
240  
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360  
gaaaccatcg gtgtgcatgg taactctcta gcagtgcct tcatgccggg acatggggac  
420  
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480  
tgggccaagg cctctctaag gcccagcggc tctcatgggc aaatgtcagg tgacacagag  
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tcagagaccc tgagtgtgcg aggggaagat attggtgaag acctgttctc tgaggccctg  
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ggccgggagc tggggcagtg ggcggggggc aagctgctgg accatggctg tgtggagagc  
660  
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780

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938

<210> 2836  
<211> 178  
<212> PRT  
<213> Homo sapiens

<400> 2836  
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20 25 30  
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35 40 45  
Thr Leu Ser Val Arg Gly Glu Asp Ile Gly Glu Asp Leu Phe Ser Glu  
50 55 60  
Ala Leu Gly Arg Ala Val Gly Gln Trp Ala Gly Ala Lys Leu Leu Asp  
65 70 75 80  
His Gly Cys Val Glu Ser Ser Ile Leu Asp Ser Ser Ala Gly Ser Ala  
85 90 95  
Pro His Tyr Glu Val Phe Val Ala Leu Arg Gly Leu Arg Asn Leu Ser  
100 105 110  
Glu Glu Asn Arg Asp Lys Leu Asp His Cys Leu Gln Glu Ala Ser Pro  
115 120 125  
Arg Tyr Lys Ser Leu Arg Phe Trp Gly Ser Val Gly Pro Ala Glu Ser  
130 135 140  
Thr Trp Trp Cys Pro Glu Ser Ser Pro Ala Pro Pro Pro Ser Ser Pro  
145 150 155 160  
Gln Arg Pro Pro Arg Pro Ser Leu Trp Asp Leu Ser Gly Trp Gly Val  
165 170 175  
Leu Gly

<210> 2837  
<211> 1250  
<212> DNA  
<213> Homo sapiens

<400> 2837  
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gaattccagg agggaagccg agaatatgaa gctgaattgg agacgcagct gcaacaaatt  
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<210> 2838

<211> 370

<212> PRT

<213> Homo sapiens

<400> 2838

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			20					25					30		
Ser	Glu	Glu	Glu	Glu	Ala	Asn	Tyr	Trp	Lys	Asp	Leu	Ala	Met	Thr	Tyr
		35				40					45				
Lys	Gln	Arg	Ala	Glu	Asn	Thr	Gln	Glu	Glu	Leu	Arg	Glu	Phe	Gln	Glu
		50				55					60				
Gly	Ser	Arg	Glu	Tyr	Glu	Ala	Glu	Leu	Glu	Thr	Gln	Leu	Gln	Gln	Ile
65					70					75					80
Glu	Thr	Arg	Asn	Arg	Asp	Leu	Leu	Ser	Glu	Asn	Asn	Arg	Leu	Arg	Met
			85						90					95	
Glu	Leu	Glu	Thr	Ile	Lys	Glu	Lys	Phe	Glu	Val	Gln	His	Ser	Glu	Gly
			100					105					110		
Tyr	Arg	Gln	Ile	Ser	Ala	Leu	Glu	Asp	Asp	Leu	Ala	Gln	Thr	Lys	Ala



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Asp Ala Leu Glu Arg Ala Lys Arg Ala Thr Ile Met Ser Leu Glu Asp
145      150      155      160
Phe Glu Gln Arg Leu Asn Gln Ala Ile Glu Arg Asn Ala Phe Leu Glu
      165      170      175
Ser Glu Leu Asp Glu Lys Glu Asn Leu Leu Glu Ser Val Gln Arg Leu
      180      185      190
Lys Asp Glu Ala Arg Asp Leu Arg Gln Glu Leu Ala Val Gln Gln Lys
      195      200      205
Gln Glu Lys Pro Arg Thr Pro Met Pro Ser Ser Val Glu Ala Glu Arg
      210      215      220
Thr Asp Thr Ala Val Gln Ala Thr Gly Ser Val Pro Ser Thr Pro Ile
225      230      235      240
Ala His Arg Gly Pro Ser Ser Ser Leu Asn Thr Pro Gly Ser Phe Arg
      245      250      255
Arg Gly Leu Asp Asp Xaa His Arg Gly Thr Pro Leu Thr Pro Ala Ala
      260      265      270
Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu Leu Arg Lys Val Gly
      275      280      285
Ala Leu Glu Ser Lys Leu Ala Ser Cys Arg Asn Leu Val Tyr Asp Gln
      290      295      300
Ser Pro Asn Arg Thr Gly Gly Pro Ala Ser Gly Arg Ser Ser Lys Asn
305      310      315      320
Arg Asp Gly Gly Glu Arg Arg Pro Ser Ser Thr Ser Val Pro Leu Gly
      325      330      335
Asp Lys Gly Ser Val Pro Ser Asn Lys Pro Leu Ala Gly Gly Glu Asn
      340      345      350
Pro Pro Ala Pro Gly Lys Arg His Ser Pro Pro Ala His Ser His Val
      355      360      365
Ser Phe
      370

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<210> 2839
<211> 606
<212> DNA
<213> Homo sapiens

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<400> 2839
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120
agetgttcct tgcactacat ccacccttac caacccaatg agtatctgaa agctttggta
180
gctgtggggg agatttgcca agactatgac agtgacaaaa tgttcctgc ctttgggttt
240
ggcgccagga tacctccaga gtacacggtc tctcatgact ttgcaatcaa ctttaatgaa
300
gacaaccag aatgtgcagg aattcaagga gttgtggaag cctatcagag ctgtcttcct
360
aagctccaac tctacgggcc caccaacatt gccccatca tccagaaggt tgccaagtca
420

```

gcgtcagagg aaactaacac caaagaggca tcgcaatact tcatcctgct gatcctgaca  
480  
gatgggtgta tcacagacat gggcgacacc cgggaggcca ttgtccatgc ctcccacctc  
540  
cccatgtcag tcatcatcgt gggagtaggg aacgctgact tcagtgcacat gcagatgctg  
600  
gacggg  
606

<210> 2840  
<211> 202  
<212> PRT  
<213> Homo sapiens

<400> 2840  
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1 5 10 15  
Ile Met Gly Gly Cys Gln Ile Gln Phe Thr Val Ala Ile Asp Phe Ala  
20 25 30  
Ala Thr Asn Gly Asp Pro Arg Asn Ser Cys Ser Leu His Tyr Ile His  
35 40 45  
Pro Tyr Gln Pro Asn Glu Tyr Leu Lys Ala Leu Val Ala Val Gly Glu  
50 55 60  
Ile Cys Gln Asp Tyr Asp Ser Asp Lys Met Phe Pro Ala Phe Gly Phe  
65 70 75 80  
Gly Ala Arg Ile Pro Pro Glu Tyr Thr Val Ser His Asp Phe Ala Ile  
85 90 95  
Asn Phe Asn Glu Asp Asn Pro Glu Cys Ala Gly Ile Gln Gly Val Val  
100 105 110  
Glu Ala Tyr Gln Ser Cys Leu Pro Lys Leu Gln Leu Tyr Gly Pro Thr  
115 120 125  
Asn Ile Ala Pro Ile Ile Gln Lys Val Ala Lys Ser Ala Ser Glu Glu  
130 135 140  
Thr Asn Thr Lys Glu Ala Ser Gln Tyr Phe Ile Leu Leu Ile Leu Thr  
145 150 155 160  
Asp Gly Val Ile Thr Asp Met Gly Asp Thr Arg Glu Ala Ile Val His  
165 170 175  
Ala Ser His Leu Pro Met Ser Val Ile Ile Val Gly Val Gly Asn Ala  
180 185 190  
Asp Phe Ser Asp Met Gln Met Leu Asp Gly  
195 200

<210> 2841  
<211> 2065  
<212> DNA  
<213> Homo sapiens

<400> 2841  
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120  
gaagggccag ttcaggtggc cggagctcct gagctgccct aggggactgc tgtgggtctg  
180

aggtggtgat gtccccacg gctgcctgcg cctgagcccc cacgcatcca cccctggggc  
240  
cactctgctg ttcaggagca cccaccctg tctctgacca tgagcagccc cccagcttac  
300  
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360  
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420  
cagtgcagt cagagcctcc cctgctgctg acaagcaagc gtaccatcta caccgccggg  
480  
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540  
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600  
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660  
caccaggtgc tgactgagca gcagcaggaa caggccgcac acaacaactt caacttcgac  
720  
caccagatg cctttgactt cgacctcatc atttccaccc tcaagaagct gaagcagggg  
780  
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840  
acactgtatg gtgcaaactg catcatcttt gagggcatca tggcctttgc tgacaagaca  
900  
ctgttggagc tcctggacat gaagatcttt gtggacacag actccgacat ccgcctggta  
960  
cggcggctgc gccgggacat cagtgcgcgc ggcggggaca tcgaggggtg catcaagcag  
1020  
tacaacaagt ttgtcaagcc ctcttcgac cagtacatcc agcccacat gcgcctggca  
1080  
gacatcgtgg tccccagagg gagcggcaac acggtggcca tcgacctgat tgtgcagcac  
1140  
gtgcacagcc agctggagga gcgtgaactc agcgtcaggg ctgcgctggc ctcggcacac  
1200  
cagtgcacc cgctgccccg gacgctgagc gtctgaaga gcacgccgca ggtacggggc  
1260  
atgcacacca tcatcaggga caaggagacc agtcgcgacg agttcatctt ctactccaag  
1320  
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1380  
gtacagaccc cgcaggggca ggactatgcg ggcaagtgt atgcggggaa gcagatcacc  
1440  
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1500  
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1560  
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1620  
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1680  
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1740  
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1800

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1920  
cgtccccacc accctcctcc tgcctcctga cccaggactg ctgaatacaa agatgttaat  
1980  
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2040  
aaaaatgaaa aaaaaaaaaa aaaaa  
2065

<210> 2842  
<211> 540  
<212> PRT  
<213> Homo sapiens

<400> 2842  
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Ala Leu Gly Ala Glu Gly Ser Asn Ala Glu Ser Leu Asp Arg Leu Leu  
20 25 30  
Pro Pro Val Gly Thr Gly Arg Ser Pro Arg Lys Arg Thr Thr Ser Gln  
35 40 45  
Cys Lys Ser Glu Pro Pro Leu Leu Arg Thr Ser Lys Arg Thr Ile Tyr  
50 55 60  
Thr Ala Gly Arg Pro Pro Trp Tyr Asn Glu His Gly Thr Gln Ser Lys  
65 70 75 80  
Glu Ala Phe Ala Ile Gly Leu Gly Gly Gly Ser Ala Ser Gly Lys Thr  
85 90 95  
Thr Val Ala Arg Met Ile Ile Glu Ala Leu Asp Val Pro Trp Val Val  
100 105 110  
Leu Leu Ser Met Asp Ser Phe Tyr Lys Val Leu His Ser Leu Pro His  
115 120 125  
Gln Val Leu Thr Glu Gln Gln Gln Glu Gln Ala Ala His Asn Asn Phe  
130 135 140  
Asn Phe Asp His Pro Asp Ala Phe Asp Phe Asp Leu Ile Ile Ser Thr  
145 150 155 160  
Leu Lys Lys Leu Lys Gln Gly Lys Ser Val Lys Val Pro Ile Tyr Asp  
165 170 175  
Phe Thr Thr His Ser Arg Lys Lys Asp Trp Lys Thr Leu Tyr Gly Ala  
180 185 190  
Asn Val Ile Ile Phe Glu Gly Ile Met Ala Phe Ala Asp Lys Thr Leu  
195 200 205  
Leu Glu Leu Leu Asp Met Lys Ile Phe Val Asp Thr Asp Ser Asp Ile  
210 215 220  
Arg Leu Val Arg Arg Leu Arg Arg Asp Ile Ser Glu Arg Gly Arg Asp  
225 230 235 240  
Ile Glu Gly Val Ile Lys Gln Tyr Asn Lys Phe Val Lys Pro Ser Phe  
245 250 255  
Asp Gln Tyr Ile Gln Pro Thr Met Arg Leu Ala Asp Ile Val Val Pro  
260 265 270  
Arg Gly Ser Gly Asn Thr Val Ala Ile Asp Leu Ile Val Gln His Val  
275 280 285  
His Ser Gln Leu Glu Glu Arg Glu Leu Ser Val Arg Ala Ala Leu Ala

290	295	300
Ser Ala His Gln Cys His Pro Leu Pro Arg Thr Leu Ser Val Leu Lys		
305	310	315
Ser Thr Pro Gln Val Arg Gly Met His Thr Ile Ile Arg Asp Lys Glu		320
	325	330
Thr Ser Arg Asp Glu Phe Ile Phe Tyr Ser Lys Arg Leu Met Arg Leu		335
	340	345
Leu Ile Glu His Ala Leu Ser Phe Leu Pro Phe Gln Asp Cys Val Val		350
	355	360
Gln Thr Pro Gln Gly Gln Asp Tyr Ala Gly Lys Cys Tyr Ala Gly Lys		365
	370	375
Gln Ile Thr Gly Val Ser Ile Leu Arg Ala Gly Glu Thr Met Glu Pro		380
385	390	395
Ala Leu Arg Ala Val Cys Lys Asp Val Arg Ile Gly Thr Ile Leu Ile		400
	405	410
Gln Thr Asn Gln Leu Thr Gly Glu Pro Glu Leu His Tyr Leu Arg Leu		415
	420	425
Pro Lys Asp Ile Ser Asp Asp His Val Ile Leu Met Asp Cys Thr Val		430
	435	440
Ser Thr Gly Ala Ala Ala Met Met Ala Val Arg Val Leu Leu Asp His		445
	450	455
Asp Val Pro Glu Asp Lys Ile Phe Leu Leu Ser Leu Leu Met Ala Glu		460
465	470	475
Met Gly Val His Ser Val Ala Tyr Ala Phe Pro Arg Val Arg Ile Ile		480
	485	490
Thr Thr Ala Val Asp Lys Arg Val Asn Asp Leu Phe Arg Ile Ile Pro		495
	500	505
Gly Ile Gly Asn Phe Gly Asp Arg Tyr Phe Gly Thr Asp Ala Val Pro		510
	515	520
Asp Gly Ser Asp Glu Glu Glu Val Ala Tyr Thr Gly		525
	530	535
		540

&lt;210&gt; 2843

&lt;211&gt; 497

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2843

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120  
caaagcccag aatttgaagc tcaaagtcc aaattccagg aagggtcgga gatgcttctg  
180  
aaccccgagg aaaagagtcc tttgaatatc tccgtaggag ttcacccccct ggactccttc  
240  
actcaggggt ttggggagca gccacagggg gacctgcca tagggccacc ttttgagatg  
300  
cccacagggg ccctgctgtc tacaccgcag tttgagatgc ttcagaatcc cctgggtctc  
360  
acaggagccc ttcgaggtcc aggtcggcgg ggtggccggg cccgggggtgg gcagggccct  
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480

caggcatcca caccggt  
497

<210> 2844  
<211> 165  
<212> PRT  
<213> Homo sapiens

<400> 2844  
Pro Arg Tyr Glu Pro Gln Ser Pro Gly Tyr Glu Pro Arg Ser Pro Gly  
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Tyr Glu Pro Arg Ser Pro Gly Tyr Glu Ser Glu Ser Ser Arg Tyr Glu  
20 25 30  
Ser Gln Asn Thr Glu Leu Lys Thr Gln Ser Pro Glu Phe Glu Ala Gln  
35 40 45  
Ser Ser Lys Phe Gln Glu Gly Ala Glu Met Leu Leu Asn Pro Glu Glu  
50 55 60  
Lys Ser Pro Leu Asn Ile Ser Val Gly Val His Pro Leu Asp Ser Phe  
65 70 75 80  
Thr Gln Gly Phe Gly Glu Gln Pro Thr Gly Asp Leu Pro Ile Gly Pro  
85 90 95  
Pro Phe Glu Met Pro Thr Gly Ala Leu Leu Ser Thr Pro Gln Phe Glu  
100 105 110  
Met Leu Gln Asn Pro Leu Gly Leu Thr Gly Ala Leu Arg Gly Pro Gly  
115 120 125  
Arg Arg Gly Gly Arg Ala Arg Gly Gly Gln Gly Pro Arg Pro Asn Ile  
130 135 140  
Cys Gly Ile Trp Gly Lys Ser Phe Gly Arg Asp Tyr Pro Asp Pro Ala  
145 150 155 160  
Gln Ala Ser Thr Pro  
165

<210> 2845  
<211> 934  
<212> DNA  
<213> Homo sapiens

<400> 2845  
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120  
ttcaccaagg ctcggggttc tatagccctt ttctgggaca gctgcatggg atccggcctc  
180  
tcaggcccca cggtgggtgc gggggctgtg gaaaggtctc agctgcaggg ggatgaatgt  
240  
gacctccagt tgcaacgtct cccccgcgt gagtgggggt atcaggccta gctcaccttg  
300  
tgtgcagtca gtgtcgagt ccacctgcgt actggatgct gctctcagtg ctgcggtgcc  
360  
acagcacaca aaaatagttc tcacgttgcc gtggagagac aagcagtcaa cgcagatata  
420  
tcctgtggca agtgatggta aatgctgtgg caagaaagca gggtctggag gtgaagggcg  
480

gtgggggaga cagggcaggg aaggtgagca gcggtctgag agtcccttgt ggcacctcgt  
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gggcattagc caaagccgtc ctgatcccaa gggacagggc agggaagggtg agtagtggtc  
600  
cgagagtccc ttgtggcacc tcatgggcat cgggtcaaagc cgtcatgacc ccgaggatgt  
660  
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720  
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780  
tttctatttc ttttctattg agttaaagggt cctgggtggca ttgtcgggtg gggcacattg  
840  
ctgttgtcat agggctgttt gccttgtgtt tcgtggagcc ccattgctga gcttacaacg  
900  
tcactctgct ctcagctccc acggcctaac catg  
934

&lt;210&gt; 2846

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2846

Met	Pro	Met	Arg	Cys	His	Lys	Gly	Leu	Ser	Asp	His	Tyr	Ser	Pro	Ser
1				5					10					15	
Leu	Pro	Cys	Pro	Leu	Gly	Ser	Gly	Arg	Leu	Trp	Leu	Met	Pro	Thr	Arg
			20					25					30		
Cys	His	Lys	Gly	Leu	Ser	Asp	Arg	Cys	Ser	Pro	Ser	Leu	Pro	Cys	Leu
		35					40				45				
Pro	His	Arg	Pro	Ser	Pro	Pro	Glu	Pro	Ala	Phe	Leu	Pro	Gln	His	Leu
	50					55				60					
Pro	Ser	Leu	Ala	Thr	Gly	Tyr	Ile	Cys	Val	Asp	Cys	Leu	Ser	Leu	His
65					70					75				80	
Gly	Asn	Val	Arg	Thr	Ile	Phe	Val	Cys	Cys	Gly	Thr	Ala	Ala	Leu	Arg
			85					90						95	
Ala	Ala	Ser	Ser	Thr	Gln	Val	Ala	Leu	Asp	Thr	Asp	Cys	Thr	Gln	Gly
			100					105					110		
Glu	Leu	Gly	Leu	Ile	Thr	Pro	Leu	Thr	Arg	Gly	Glu	Thr	Leu	Gln	Leu
		115					120					125			
Glu	Val	Thr	Phe	Ile	Pro	Leu	Gln	Leu	Arg	Pro	Phe	His	Ser	Pro	Arg
	130					135					140				
Thr	His	Arg	Gly	Ala											
145															

&lt;210&gt; 2847

&lt;211&gt; 2830

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2847

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120

cagctctcac atgaccacga atctgttggc cctcctagcc tggatgctca gccaactca  
180  
aagacagaaa gatcaaaatc atatgatgag ggtctggatg attacagaga agatgcaaaa  
240  
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300  
tcagaagact ctgggtccag aaaagattct tcctcagagg tcttcagtga tgctgccaag  
360  
gaagggtggc ttcatttccg accccttgtc accgataagg gcaagcgagt tgggtggaagt  
420  
attcggccat ggaaacagat gtatgttgtc cttcggggtc attcacttta cctgtacaaa  
480  
gataaaagag agcagacgac tccgtctgag gaagagcagc ccatcagtgt taatgcttgc  
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ttgatagaca tctcttacag tgagaccaag aggaaaaatg tgtttcgact caccacgtcc  
600  
gactgtgaat gcctgtttca ggctgaagac agagatgata tgctagcttg gatcaagacg  
660  
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720  
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780  
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840  
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900  
agtcccccac aagacaaagg cacatggaga aaaggcatc caagtatcat gagaaagaca  
960  
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1020  
gctcatacta atcggatatat tccattaata gttgacatat gttgcaaatt agttgaagaa  
1080  
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1380  
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1440  
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1620  
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1680  
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1740



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1860  
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1920  
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1980  
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2040  
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2100  
ccaactctca gctgtcgtt tgccatcctg aaagagagcc ccaggctact tctggcacag  
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2280  
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2340  
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2400  
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2460  
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2520  
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2580  
agttgcaccg aggggaagttt aacatcaagt ttagatagcc ggagacagct cttcagttcc  
2640  
cataaactca tcacatgtga tactctctcc aggaaaaaat cagcgagatt caagtcagac  
2700  
agtggaaagtc taggagatgc caagaacgag aaagaaacac cttcattaac taaagtgttt  
2760  
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2820  
gaaaaacagg  
2830

&lt;210&gt; 2848

&lt;211&gt; 856

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2848

Xaa	Asp	His	Asp	Ile	Ala	His	Ile	Pro	Ala	Ser	Ala	Val	Ile	Ser	Ala
1				5				10					15		
Ser	Thr	Ser	Gln	Val	Pro	Ser	Ile	Ala	Thr	Val	Pro	Pro	Cys	Leu	Thr
			20				25					30			
Thr	Ser	Ala	Pro	Leu	Ile	Arg	Arg	Gln	Leu	Ser	His	Asp	His	Glu	Ser
		35				40				45					
Val	Gly	Pro	Pro	Ser	Leu	Asp	Ala	Gln	Pro	Asn	Ser	Lys	Thr	Glu	Arg
	50				55				60						
Ser	Lys	Ser	Tyr	Asp	Glu	Gly	Leu	Asp	Asp	Tyr	Arg	Glu	Asp	Ala	Lys

65                                70                                75                                80  
Leu Ser Phe Lys His Val Ser Ser Leu Lys Gly Ile Lys Ile Ala Asp  
                                 85                                90                                95  
Ser Gln Lys Ser Ser Glu Asp Ser Gly Ser Arg Lys Asp Ser Ser Ser  
                                 100                                105                                110  
Glu Val Phe Ser Asp Ala Ala Lys Glu Gly Trp Leu His Phe Arg Pro  
                                 115                                120                                125  
Leu Val Thr Asp Lys Gly Lys Arg Val Gly Gly Ser Ile Arg Pro Trp  
                                 130                                135                                140  
Lys Gln Met Tyr Val Val Leu Arg Gly His Ser Leu Tyr Leu Tyr Lys  
145                                150                                155                                160  
Asp Lys Arg Glu Gln Thr Thr Pro Ser Glu Glu Glu Gln Pro Ile Ser  
                                 165                                170                                175  
Val Asn Ala Cys Leu Ile Asp Ile Ser Tyr Ser Glu Thr Lys Arg Lys  
                                 180                                185                                190  
Asn Val Phe Arg Leu Thr Thr Ser Asp Cys Glu Cys Leu Phe Gln Ala  
195                                200                                205  
Glu Asp Arg Asp Asp Met Leu Ala Trp Ile Lys Thr Ile Gln Glu Ser  
210                                215                                220  
Ser Asn Leu Asn Glu Glu Asp Thr Gly Val Thr Asn Arg Asp Leu Ile  
225                                230                                235                                240  
Ser Arg Arg Ile Lys Glu Tyr Asn Asn Leu Met Ser Lys Ala Glu Gln  
                                 245                                250                                255  
Leu Pro Lys Thr Pro Arg Gln Ser Leu Ser Ile Arg Gln Thr Leu Leu  
                                 260                                265                                270  
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Asp Lys Gly Thr Trp Arg Lys Gly Ile Pro Ser Ile Met Arg Lys Thr  
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Asp Cys Pro Pro Ala His Thr Asn Arg Tyr Ile Pro Leu Ile Val Asp  
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Ile Cys Cys Lys Leu Val Glu Glu Arg Gly Leu Glu Tyr Thr Gly Ile  
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Tyr Arg Val Pro Gly Asn Asn Ala Ala Ile Ser Ser Met Gln Glu Glu  
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Pro Glu Pro Leu Phe Thr Asn Asp Lys Tyr Ala Asp Phe Ile Glu Ala  
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Glu Asp Asn Met Thr His Met Val Thr His Met Pro Asp Gln Tyr Lys

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785 790 795 800  
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<212> DNA  
<213> Homo sapiens

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 <213> Homo sapiens

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1980  
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<212> PRT

<213> Homo sapiens

<400> 2852

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Leu	Tyr	Met	Leu	Val	Lys	Met	Ser	His	His	Val	Trp	Thr	Ala	Gln	Asn
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Glu	Ala	Arg	Val	Ala	Gln	Gly	Ile	Arg	Glu	Glu	Glu	Val	Ser	Tyr	Gln
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Lys	His	Leu	Cys	Glu	Glu	Glu	Asn	Leu	Leu	Gln	Val	Val	Trp	His	Ser
			260					265					270		
Met	Gln	Asp	Glu	Phe	Ile	Arg	Gln	Tyr	Lys	His	Phe	Glu	Gly	Leu	Ile
			275					280					285		
Ala	Arg	Cys	Tyr	Pro	Gly	Ser	Gly	Val	Thr	Met	Glu	Phe	Thr	Ile	Gln

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<212> DNA  
<213> Homo sapiens

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Arg Asn Ser Glu Val Val Ala Ile Lys Lys Met Ser Tyr Ser Gly Lys  
50 55 60  
Gln Ser Asn Glu Lys Trp Gln Asp Ile Ile Lys Glu Val Arg Phe Leu  
65 70 75 80  
Gln Lys Leu Arg His Pro Asn Thr Ile Gln Tyr Arg Gly Cys Tyr Leu  
85 90 95  
Arg Glu His Thr Ala Trp Leu Val Met Glu Tyr Cys Leu Gly Ser Ala  
100 105 110  
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115 120 125  
Ala Ala Val Thr His Gly Ala Leu Gln Gly Leu Ala Tyr Leu His Ser  
130 135 140  
His Asn Met Ile His Arg Asp Val Lys Ala Gly Asn Ile Leu Leu Ser  
145 150 155 160  
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165 170 175  
Ala Pro Ala Asn Ser Phe Val Gly Thr Pro Tyr Trp Met Ala Pro Glu  
180 185 190  
Val Ile Leu Ala Met Asp Glu Gly Gln Tyr Asp Gly Lys Val Asp Val  
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Trp Ser Leu Gly Ile Thr Cys Ile Glu Leu Ala Glu Arg Lys Pro Pro  
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Leu Phe Asn Met Asn Ala Met Ser Ala Leu Tyr His Ile Ala Gln Asn  
225 230 235 240  
Glu Ser Pro Val Leu Gln Ser Gly His Trp Ser Glu Tyr Phe Arg Asn

				245				250				255			
Phe	Val	Asp	Ser	Cys	Leu	Gln	Lys	Ile	Pro	Gln	Asp	Arg	Pro	Thr	Ser
				260				265				270			
Glu	Val	Leu	Leu	Lys	His	Arg	Phe	Val	Leu	Arg	Glu	Arg	Pro	Pro	Thr
				275				280				285			
Val	Ile	Met	Asp	Leu	Ile	Gln	Arg	Thr	Lys	Asp	Ala	Val	Arg	Glu	Leu
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Asp	Asn	Leu	Gln	Tyr	Arg	Lys	Met	Lys	Lys	Ile	Leu	Phe	Gln	Glu	Ala
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				325				330				335			
Pro	Tyr	Met	His	Arg	Ala	Gly	Thr	Leu	Thr	Ser	Leu	Glu	Ser	Ser	His
				340				345				350			
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				355				360				365			
Asn	Ser	Leu	Ala	Asp	Ala	Ser	Asp	Asn	Glu	Glu	Glu	Glu	Glu	Glu	Glu
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Met	Met	Gln	Glu	Gly	Glu	His	Thr	Val	Thr	Ser	His	Ser	Ser	Ile	Ile
				405				410				415			
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Glu	Ile	Thr	Pro	Ser	Pro	Leu	Gln	Pro	Pro	Ala	Ala	Pro	Ala	Pro	Thr
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Ser	Thr	Thr	Ser	Ser	Ala	Arg	Arg	Arg	Ala	Tyr	Cys	Arg	Asn	Arg	Asp
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His	Phe	Ala	Thr	Ile	Arg	Thr	Ala	Ser	Leu	Val	Ser	Arg	Gln	Ile	Gln
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Arg	Met	Arg	Arg	Gln	His	Gln	Lys	Gln	Leu	Leu	Ala	Leu	Glu	Ser	Arg
				500				505				510			
Leu	Arg	Gly	Glu	Arg	Glu	Glu	His	Ser	Ala	Arg	Leu	Gln	Arg	Glu	Leu
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Glu	Ala	Gln	Arg	Ala	Gly	Phe	Gly	Ala	Glu	Ala	Glu	Lys	Leu	Ala	Arg
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Arg	His	Gln	Ala	Ile	Gly	Glu	Lys	Glu	Ala	Arg	Ala	Ala	Gln	Ala	Glu
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Glu	Arg	Lys	Phe	Gln	Gln	His	Ile	Leu	Gly	Gln	Gln	Lys	Lys	Glu	Leu
				565				570				575			
Ala	Ala	Leu	Leu	Glu	Ala	Gln	Lys	Arg	Thr	Tyr	Lys	Leu	Arg	Lys	Glu
				580				585				590			
Gln	Leu	Lys	Glu	Glu	Leu	Gln	Glu	Asn	Pro	Ser	Thr	Pro	Lys	Arg	Glu
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Leu	Gln	Cys	Arg	Gln	Tyr	Lys	Arg	Lys	Met	Leu	Leu	Ala	Arg	His	Ser
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				660				665				670			
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Asn Lys Arg Arg Glu Gln Glu Leu Arg Gln Lys His Ala Ala Gln Val		
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Arg Gln Gln Pro Lys Ser Leu Lys Val Arg Ala Gly Gln Arg Pro Pro		
740	745	750
Gly Leu Pro Leu Pro Ile Pro Gly Ala Leu Gly Pro Pro Asn Thr Gly		
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Thr Pro Ile Glu Gln Gln Pro Cys Ser Pro Gly Gln Glu Ala Val Leu		
770	775	780
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785	790	795
Ile Leu Gly Lys Glu Gly Ala Thr Leu Glu Pro Lys Gln Gln Arg Ile		
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Ser Leu Val Asp Glu Glu Val Trp Gly Leu Pro Glu Glu Ile Glu Glu		
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Glu Glu Ala Gly Thr Trp Ser Leu Trp Gly Lys Glu Asp Glu Ser Leu		
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Leu Asp Glu Glu Phe Glu Leu Gly Trp Val Gln Gly Pro Ala Leu Thr		
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Pro Val Pro Glu Glu Glu Glu Glu Glu Glu Glu Gly Ala Pro Ile Gly		
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915	920	925
Glu Pro Pro Pro Thr His Leu Arg Pro Cys Pro Ala Ser Gln Leu Pro		
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Gly Leu Leu Ser His Gly Leu Leu Ala Gly Leu Ser Phe Ala Val Gly		
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Ser Ser Ser Gly Leu Leu Pro Leu Leu Leu Leu Leu Leu Leu Pro Leu		
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Ala Val Gly Asp Arg Gly Leu Phe Ala Leu Tyr Pro Lys Thr Asn Lys		

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                          1155                    1160                    1165  
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                          1170                    1175                    1180  
 Leu Leu Arg Gly Glu Arg Pro Thr Arg Ile Pro Arg Leu Leu Pro Arg  
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 Ser Gln Arg Gln Leu Gly Pro Pro Ala Ser His Gln Pro Leu Pro Gly  
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 <211> 1676  
 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 2856

&lt;211&gt; 401

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2856

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 Gln Thr Ile Thr Gly Ser Asp Pro Glu Glu Ala Ile Phe Asp Thr Leu  
 35 40 45  
 Cys Thr Asp Asp Ser Ser Glu Glu Ala Lys Thr Leu Thr Met Asp Ile  
 50 55 60  
 Leu Thr Leu Ala His Thr Ser Thr Glu Ala Lys Gly Leu Ser Ser Glu  
 65 70 75 80  
 Ser Ser Ala Ser Ser Asp Gly Pro His Pro Val Ile Thr Pro Ser Arg  
 85 90 95  
 Ala Ser Glu Ser Ser Ala Ser Ser Asp Gly Pro His Pro Val Ile Thr  
 100 105 110  
 Pro Ser Arg Ala Ser Glu Ser Ser Ala Ser Ser Asp Gly Pro His Pro  
 115 120 125  
 Val Ile Thr Pro Ser Trp Ser Pro Gly Ser Asp Val Thr Leu Leu Ala  
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480
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&lt;210&gt; 2858

&lt;211&gt; 220

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2858

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Glu	Glu	Phe	Leu	Val	Ser	Leu	Ala	Leu	Leu	Ile	Thr	Glu	Gly	Arg	Thr
			20					25					30		
Pro	Glu	Cys	Ser	Val	Lys	Gly	Arg	Thr	Glu	Ser	Phe	His	Cys	Pro	Pro
		35				40					45				
Ala	Gln	Ser	Cys	Tyr	Pro	Val	Thr	Thr	Lys	His	Glu	Cys	Ser	Asp	Lys



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Leu Trp Lys Asn Asn Leu Pro Ile Met Val Glu Met Met Leu Leu Pro		80
	85	90
Asp Cys Cys Tyr Ser Asp Asp Gly Pro Thr Thr Glu Gly Ile Asp Leu		95
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	115	120
Leu Glu Pro Val Pro Arg Gln Asn Gly Asp Arg Phe Ile Glu Glu Lys		125
	130	135
Thr Leu Leu Leu Ala Val Arg Ser Phe Val Phe Phe Ser Gln Leu Ser		140
	145	150
Ala Trp Leu Ser Val Ser His Gly Ala Ile Pro Arg Asn Ile Leu Tyr		155
	160	165
Arg Ile Ser Ala Ala Asp Val Asp Leu Gln Trp Asn Phe Ser Gln Thr		170
	175	180
Pro Ile Glu His Val Phe Pro Val Pro Asn Val Ser His Asn Val Ala		185
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Leu Lys Val Ser Gly Gln Ser Leu Ala Gln Thr Ile		200
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	215	220

&lt;210&gt; 2859

&lt;211&gt; 1029

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2859

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780

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<211> 343

<212> PRT

<213> Homo sapiens

<400> 2860

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Asp	Ile	Ser	Ala	Arg	Lys	Met	Ala	His	Pro	Ala	Met	Phe	Pro	Arg	Arg
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Gly	Ser	Gly	Ser	Gly	Ser	Ala	Ser	Ala	Leu	Asn	Ala	Ala	Gly	Thr	Gly
	50				55					60					
Val	Gly	Ser	Asn	Ala	Thr	Ser	Ser	Glu	Asp	Phe	Pro	Pro	Pro	Ser	Leu
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Leu	Gln	Pro	Pro	Pro	Pro	Ala	Ala	Ser	Ser	Thr	Ser	Gly	Pro	Gln	Pro
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Gln	Ile	Thr	Ser	Val	Thr	Pro	Ala	Gln	Ile	Ser	Ala	Ser	Ile	Ser	Ser
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Asn	Asn	Ser	Ile	Ala	Glu	Asp	Thr	Glu	Ser	Tyr	Asp	Asp	Leu	Asp	Glu
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Ser	His	Thr	Glu	Asp	Leu	Ser	Ser	Ser	Glu	Ile	Leu	Asp	Val	Ser	Leu
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Ser	Pro	Val	Ser	Arg	Lys	Leu	Ser	Thr	Thr	Gly	Ser	Ser	Asp	Ser	Ile
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Thr	Pro	Val	Ala	Pro	Thr	Ser	Ala	Val	Ser	Ser	Ser	Gly	Ser	Pro	Ala

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 660  
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 756

<210> 2862  
 <211> 252  
 <212> PRT  
 <213> Homo sapiens

<400> 2862  
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 1                      5                      10                      15  
 Ser Leu Asp Glu Asp Leu Ser Phe His Ser Pro Ser Leu Asp Leu Val  
                     20                      25                      30  
 Ser Glu Ala Leu Ala Val Ile Asn Asn Gly Asn Lys Gly Pro Pro Val  
                     35                      40                      45  
 Gly Ser Arg Ile Ser Met Pro Thr Thr Lys Pro Arg Pro Gly Leu Arg

50	55	60
Glu Glu Lys Leu Ala Ser Ile Met Ser Lys Leu Pro Leu Ala Thr Pro		
65	70	75
Lys Lys Leu Asp Ser Thr Gln Thr Thr His Ser Ser Ser Leu Ile Ala		80
	85	90
Gly His Thr Gly Pro Val Pro Lys Lys Pro Gln Asp Leu Ala His Thr		95
	100	105
Gly Ile Ser Ser Gly Leu Ile Ala Gly Ser Ser Ile Gln Asn Pro Lys		110
	115	120
Val Ser Leu Glu Pro Leu Pro Ala Arg Leu Leu Gln Gln Gly Leu Gln		125
	130	135
Arg Ser Ser Gln Ile His Thr Ser Ser Ser Ser Gln Thr His Val Ser		140
145	150	155
Ser Ser Ser Gln Ala Gln Ile Ala Ala Ser Ser His Ala Leu Gly Thr		160
	165	170
Ser Glu Ala Gln Asp Ala Ser Ser Leu Thr Gln Val Thr Lys Val His		175
	180	185
Gln His Ser Ala Val Gln Gln Asn Tyr Val Ser Pro Leu Gln Ala Thr		190
	195	200
Ile Ser Lys Ser Gln Thr Asn Pro Val Val Lys Leu Ser Asn Asn Pro		205
	210	215
Gln Leu Ser Cys Ser Ser Leu Ile Lys Thr Ser Asp Lys Pro Leu		220
225	230	235
Met Tyr Arg Leu Pro Leu Ser Thr Pro Phe Thr Arg		240
	245	250

&lt;210&gt; 2863

&lt;211&gt; 711

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2863

naccgacgtc gaatatccat gcagcgcgct ccgggagctg cacgngctg cgtggaaaga  
60  
gcgcccagcg gtggcgctcg tgcgcgcgcc tctcgtcgg gaagaatcgt ttggtctcct  
120  
gccgtgcccg gaatcccagt cagaagttcc agcctgccac tggtctctga tgccatgcc  
180  
gcaccaactc aactgttttt tctctcctc cgtaactgtg aactgagcag gatctatggc  
240  
actgcatgtt actgccacca caaacatctc tgttggtcct catcgtacat tctcagagt  
300  
cgactgagat acacacctca tccagcatat gctacctttt gcaggccaaa ggagaactgg  
360  
tggcagtaca cccaaggaag gagatatgct tccacaccac agaaatttta cctcacacct  
420  
ccacaagtca atagcatcct taaagctaata gaatacagtt tcaaagtgcc agaatttgac  
480  
ggcaaaaatg tcagttctat ccttggtatt gacagcaatc agctgcctgc aaatgcaccc  
540  
attgaggacc ggagaagtgc agcaacctgc ttgcagacca gagggatgct tttgggggtt  
600  
tttgatggcc atgcagggtg tgcttggtcc caggcagtca gtgaaagact cttttattat  
660

attgctgtct ctttggtacc ccatgagact ttgctagaga ttgaaaatgc a  
711

<210> 2864  
<211> 237  
<212> PRT  
<213> Homo sapiens

<400> 2864  
Xaa Arg Arg Arg Ile Ser Met Gln Arg Ala Pro Gly Ala Ala Arg Xaa  
1 5 10 15  
Cys Val Glu Arg Ala Pro Ser Gly Gly Val Val Val Ala Pro Ser Ser  
20 25 30  
Ser Gly Arg Ile Val Trp Ser Pro Ala Val Pro Gly Ile Pro Val Arg  
35 40 45  
Ser Ser Ser Leu Pro Leu Phe Ser Asp Ala Met Pro Ala Pro Thr Gln  
50 55 60  
Leu Phe Phe Pro Leu Ile Arg Asn Cys Glu Leu Ser Arg Ile Tyr Gly  
65 70 75 80  
Thr Ala Cys Tyr Cys His His Lys His Leu Cys Cys Ser Ser Ser Tyr  
85 90 95  
Ile Pro Gln Ser Arg Leu Arg Tyr Thr Pro His Pro Ala Tyr Ala Thr  
100 105 110  
Phe Cys Arg Pro Lys Glu Asn Trp Trp Gln Tyr Thr Gln Gly Arg Arg  
115 120 125  
Tyr Ala Ser Thr Pro Gln Lys Phe Tyr Leu Thr Pro Pro Gln Val Asn  
130 135 140  
Ser Ile Leu Lys Ala Asn Glu Tyr Ser Phe Lys Val Pro Glu Phe Asp  
145 150 155 160  
Gly Lys Asn Val Ser Ser Ile Leu Gly Phe Asp Ser Asn Gln Leu Pro  
165 170 175  
Ala Asn Ala Pro Ile Glu Asp Arg Arg Ser Ala Ala Thr Cys Leu Gln  
180 185 190  
Thr Arg Gly Met Leu Leu Gly Val Phe Asp Gly His Ala Gly Cys Ala  
195 200 205  
Cys Ser Gln Ala Val Ser Glu Arg Leu Phe Tyr Tyr Ile Ala Val Ser  
210 215 220  
Leu Leu Pro His Glu Thr Leu Leu Glu Ile Glu Asn Ala  
225 230 235

<210> 2865  
<211> 585  
<212> DNA  
<213> Homo sapiens

<400> 2865  
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agaagtagta gaagacaaag acagttcttt aaattcttga gaagtatgag ctctgtgtat  
120  
ctgcagtgtgta aagttttgat atgtgatagc agtgaccacc agtctcgctg caatcaaggt  
180  
tgtgtctcca gaagcaaacg agacatttct tcatataaat ggaaaacaga ttccatcata  
240

ggacccattc gtctgaaaag ggatcgaagt gcaagtggca attcaggatt tcagcatgaa  
300  
acacatgcgg aagaaactcc aaaccagcct ttcaacagtg tgcattctgtt ttccttcatg  
360  
gttctagctc tgaatgtggt gactgtagcg acaatcacag tgaggcattt tgtaaataca  
420  
cgggcagact acaaatacca gaagctgcag aactattaac taacaggtcc aaccctaagt  
480  
gagacatgtt tctccaggat gccaaaggaa atgctacctc gtggctacac atattatgaa  
540  
taaatagaga agggcctgaa agtggcacac aggcctgcaa aaaaa  
585

&lt;210&gt; 2866

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2866

Glu	Arg	Arg	Ser	Ser	Arg	Arg	Gln	Arg	Gln	Phe	Phe	Lys	Phe	Leu	Arg
1				5					10					15	
Ser	Met	Ser	Ser	Val	Tyr	Leu	Gln	Cys	Lys	Val	Leu	Ile	Cys	Asp	Ser
			20					25					30		
Ser	Asp	His	Gln	Ser	Arg	Cys	Asn	Gln	Gly	Cys	Val	Ser	Arg	Ser	Lys
		35					40					45			
Arg	Asp	Ile	Ser	Ser	Tyr	Lys	Trp	Lys	Thr	Asp	Ser	Ile	Ile	Gly	Pro
	50					55				60					
Ile	Arg	Leu	Lys	Arg	Asp	Arg	Ser	Ala	Ser	Gly	Asn	Ser	Gly	Phe	Gln
65				70					75					80	
His	Glu	Thr	His	Ala	Glu	Glu	Thr	Pro	Asn	Gln	Pro	Phe	Asn	Ser	Val
			85					90					95		
His	Leu	Phe	Ser	Phe	Met	Val	Leu	Ala	Leu	Asn	Val	Val	Thr	Val	Ala
			100					105					110		
Thr	Ile	Thr	Val	Arg	His	Phe	Val	Asn	Gln	Arg	Ala	Asp	Tyr	Lys	Tyr
	115						120					125			
Gln	Lys	Leu	Gln	Asn	Tyr										
			130												

&lt;210&gt; 2867

&lt;211&gt; 444

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2867

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ctgtcggccg ccgccatcaa gaggatcgtg gctacagcta aggccagtgg gaagaagctg  
120  
cagaaggtga ctctgaaggt gtcgccacgg ggaattatcc ttcattccagg ccatcatcca  
180  
gctcccagac aacactgctg ccactcaagg cttgtggccg cggcacctcg tccatgttgg  
240  
tggtgttggc gctgaccgtg gacagcgggg ccttagccgt ctctcttaag tccagcaggt  
300

tcccagtggc gaccaagctc ttcaaggggg ggggtgcagtc ttggcggggc cccaggacgt  
360  
ccctccctc ttggttggt ttgtccctct tctctttctc ttccttgga acctgccaaa  
420  
actcaaaggc gactttgaag gcct  
444

&lt;210&gt; 2868

&lt;211&gt; 84

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2868

Met	Leu	Phe	Ser	Leu	Lys	Tyr	Leu	Gly	Met	Thr	Leu	Val	Glu	Gln	Pro
1				5				10					15		
Lys	Gly	Glu	Glu	Leu	Ser	Ala	Ala	Ala	Ile	Lys	Arg	Ile	Val	Ala	Thr
		20					25					30			
Ala	Lys	Ala	Ser	Gly	Lys	Lys	Leu	Gln	Lys	Val	Thr	Leu	Lys	Val	Ser
	35				40			45							
Pro	Arg	Gly	Ile	Ile	Leu	His	Pro	Gly	His	His	Pro	Ala	Pro	Arg	Gln
	50				55			60							
His	Cys	Cys	His	Ser	Arg	Leu	Val	Ala	Ala	Ala	Pro	Arg	Pro	Cys	Trp
65				70				75						80	
Trp	Cys	Trp	Arg												

&lt;210&gt; 2869

&lt;211&gt; 5811

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2869

ntcacatcac catgacaacc ccctgccctt tctccattcc tacagcccaa ctatggaaac  
60  
cagcaatatg gaccaaacag ccagttcccc acccagccag gccagtaccc tacccecaac  
120  
cccccaaggc cactcacctc ccccaactac ccaggacaaa ggatgccag ccaaccagc  
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tccggacagt acccaccctc cacagtcaac atggggcagt attacaagcc agaacagttt  
240  
aatggacaaa ataacacgtt ctcggaagc agctacagta actacagcca agggaatgtc  
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420  
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480  
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600  
gtctacaaga ccctgataat gaggcctgac ctggagctgc aattcaagtg ctaccaccac  
660

gaggaccggc agatgaacac caactggccc gcctcgggtgc aggtcagcgt gaacgccacg  
720  
ccgctcacca tcgagcgagg cgacaacaag acctcccaca agcccctgca cctgaagcac  
780  
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840  
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900  
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960  
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1080  
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1200  
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2280



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2760  
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5811

&lt;210&gt; 2870

&lt;211&gt; 258

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2870

Glu	Phe	Glu	Glu	Val	Thr	Ile	Asp	Pro	Thr	Cys	Ser	Trp	Arg	Pro	Val
1			5					10						15	
Pro	Ile	Lys	Ser	Asp	Leu	His	Ile	Lys	Asp	Asp	Pro	Asp	Gly	Ile	Pro
		20						25					30		
Ser	Lys	Arg	Phe	Lys	Thr	Met	Ser	Pro	Ser	Gln	Met	Ile	Met	Pro	Asn
		35					40					45			
Val	Met	Glu	Met	Ile	Ala	Ala	Leu	Gly	Pro	Gly	Pro	Ser	Pro	Tyr	Pro
	50					55				60					
Leu	Pro	Pro	Pro	Pro	Gly	Gly	Thr	Asn	Ser	Asn	Asp	Tyr	Ser	Ser	Gln
65					70					75					80
Gly	Asn	Asn	Tyr	Gln	Gly	His	Gly	Asn	Phe	Asp	Phe	Pro	His	Gly	Asn
				85				90						95	
Pro	Gly	Gly	Thr	Ser	Met	Asn	Asp	Phe	Met	His	Gly	Pro	Pro	Gln	Leu
			100					105					110		
Ser	His	Pro	Pro	Asp	Met	Pro	Asn	Asn	Met	Ala	Ala	Leu	Glu	Lys	Pro
		115					120					125			
Leu	Ser	His	Pro	Met	Gln	Glu	Thr	Met	Pro	His	Ala	Gly	Ser	Ser	Asp
	130				135						140				
Gln	Pro	His	Pro	Ser	Ile	Gln	Gln	Gly	Leu	His	Val	Pro	His	Pro	Ser
145					150					155					160
Ser	Gln	Ser	Gly	Pro	Pro	Leu	His	His	Ser	Gly	Ala	Pro	Pro	Pro	Pro
			165						170					175	
Pro	Ser	Gln	Pro	Pro	Arg	Gln	Pro	Pro	Gln	Ala	Ala	Pro	Ser	Ser	His
		180							185					190	
Pro	His	Ser	Asp	Leu	Thr	Phe	Asn	Pro	Ser	Ser	Ala	Leu	Glu	Gly	Gln
		195					200					205			
Ala	Gly	Ala	Gln	Gly	Ala	Ser	Asp	Met	Pro	Glu	Pro	Ser	Leu	Asp	Leu
	210					215					220				
Leu	Pro	Glu	Leu	Thr	Asn	Pro	Asp	Glu	Leu	Leu	Ser	Tyr	Leu	Asp	Pro
225					230					235					240
Pro	Asp	Leu	Pro	Ser	Asn	Ser	Asn	Asp	Asp	Leu	Leu	Ser	Leu	Phe	Glu
				245					250					255	

Asn Asn

&lt;210&gt; 2871

&lt;211&gt; 786

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2871

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786

&lt;210&gt; 2872

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2872

Gly	Thr	Met	Thr	Arg	Cys	Ser	His	Gln	Gln	Ser	Pro	Tyr	Gln	Leu	Leu
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Phe	Gly	Glu	Pro	Tyr	Ile	Phe	Glu	Glu	Leu	Leu	Gly	Leu	Lys	Ile	Arg
			20					25					30		
Ile	Ser	Pro	Asp	Ala	Phe	Phe	Gln	Ile	Asn	Thr	Ala	Gly	Ala	Glu	Met
			35				40					45			
Leu	Tyr	Trp	Thr	Val	Gly	Glu	Leu	Thr	Gly	Val	Asn	Ser	Asp	Thr	Ile
			50			55				60					
Leu	Leu	Asp	Ile	Cys	Cys	Gly	Thr	Gly	Val	Ile	Gly	Leu	Pro	Leu	Ala
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Gln	His	Thr	Ser	Arg	Val	Leu	Gly	Ile	Glu	Leu	Leu	Glu	Gln	Ala	Val
			85					90						95	
Glu	Asp	Ala	Arg	Trp	Thr	Ala	Ala	Phe	Asn	Gly	Ile	Thr	Asn	Ser	Glu
			100					105					110		
Phe	His	Thr	Gly	Gln	Ala	Glu	Lys	Ile	Leu	Pro	Gly	Leu	Leu	Lys	Ser
			115				120					125			
Lys	Glu	Asp	Gly	Gln	Ser	Ile	Val	Ala	Val	Val	Asn	Pro	Ala	Arg	Ala

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<210> 2873  
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<212> DNA  
<213> Homo sapiens

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1187

<210> 2874  
<211> 248  
<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2874

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His Ser Met Gln Ala Leu Ser Trp Arg Lys Leu Tyr Leu Ser Arg Ala  
20 25 30  
Lys Leu Lys Ala Ser Ser Arg Thr Ser Ala Leu Leu Ser Gly Phe Ala  
35 40 45  
Met Val Ala Met Val Glu Val Gln Leu Asp Ala Asp His Asp Tyr Pro  
50 55 60  
Pro Gly Leu Leu Ile Ala Phe Ser Ala Cys Thr Thr Val Leu Val Ala  
65 70 75 80  
Gly His Leu Phe Ala Leu Met Ile Ser Thr Cys Ile Leu Pro Asn Ile  
85 90 95  
Glu Ala Val Ser Asn Cys Thr Ile Ser Thr Arg Lys Glu Ser Pro His  
100 105 110  
Glu Arg Met His Arg His Ile Glu Leu Ala Trp Ala Phe Ser Thr Val  
115 120 125  
Ile Gly Thr Leu Leu Phe Leu Ala Glu Val Val Leu Leu Cys Trp Val  
130 135 140  
Lys Phe Leu Pro Leu Lys Lys Gln Pro Gly Gln Pro Arg Pro Thr Ser  
145 150 155 160  
Lys Pro Pro Ala Ser Gly Ala Ala Ala Asn Val Ser Thr Ser Gly Ile  
165 170 175  
Thr Pro Gly Gln Ala Ala Ala Ile Ala Ser Thr Thr Ile Met Val Pro  
180 185 190  
Phe Gly Leu Ile Phe Ile Val Phe Ala Val His Phe Tyr Arg Ser Leu  
195 200 205  
Val Ser His Lys Thr Asp Arg Gln Phe Gln Glu Leu Asn Glu Leu Ala  
210 215 220  
Glu Phe Ala Arg Leu Gln Asp Gln Leu Asp His Arg Gly Asp His Pro  
225 230 235 240  
Leu Thr Pro Gly Ser His Tyr Ala  
245

&lt;210&gt; 2875

&lt;211&gt; 593

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2875

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240  
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300  
ccaatggata ccatatttgt taagcaagtt aaagaaggag gacctgcttt tgaagctgga  
360

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593

<210> 2876  
<211> 193  
<212> PRT  
<213> Homo sapiens

<400> 2876  
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20 25 30  
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35 40 45  
Pro Gly Pro Lys Thr Val Thr Leu Lys Arg Thr Ser Gln Gly Phe Gly  
50 55 60  
Phe Thr Leu Arg His Phe Ile Val Tyr Pro Pro Glu Ser Ala Ile Gln  
65 70 75 80  
Phe Ser Tyr Lys Asp Glu Glu Asn Gly Asn Arg Gly Gly Lys Gln Arg  
85 90 95  
Asn Arg Leu Glu Pro Met Asp Thr Ile Phe Val Lys Gln Val Lys Glu  
100 105 110  
Gly Gly Pro Ala Phe Glu Ala Gly Leu Cys Thr Gly Asp Arg Ile Ile  
115 120 125  
Lys Val Asn Gly Glu Ser Val Ile Gly Lys Thr Tyr Ser Gln Val Ile  
130 135 140  
Ala Leu Ile Gln Asn Ser Asp Thr Thr Leu Glu Leu Ser Val Met Pro  
145 150 155 160  
Lys Asp Glu Asp Ile Leu Gln Val Val Ser Phe Ile Tyr Ser Tyr Met  
165 170 175  
Ser Cys Phe Thr Val Met Asn Val Arg Lys Ile Phe Leu Arg Trp Lys  
180 185 190  
Tyr

<210> 2877  
<211> 1921  
<212> DNA  
<213> Homo sapiens

<400> 2877  
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180

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1800



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1860

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1920

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1921

<210> 2878

<211> 451

<212> PRT

<213> Homo sapiens

<400> 2878

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		20					25						30		
Thr	Glu	Glu	Gly	Lys	Glu	Val	Trp	Asp	Tyr	Val	Thr	Val	Arg	Lys	Asp
		35					40					45			
Ala	Tyr	Met	Phe	Trp	Trp	Leu	Tyr	Tyr	Ala	Thr	Thr	Pro	Ala	Arg	Thr
	50					55					60				
Ser	Glu	Leu	Pro	Leu	Val	Met	Trp	Leu	Gln	Gly	Gly	Pro	Gly	Gly	Ser
65					70					75					80
Ser	Thr	Gly	Phe	Gly	Asn	Phe	Glu	Glu	Ile	Gly	Pro	Leu	Asp	Ser	Asp
				85					90					95	
Leu	Lys	Pro	Arg	Lys	Thr	Thr	Trp	Leu	Gln	Ala	Ala	Ser	Leu	Leu	Phe
			100					105					110		
Val	Asp	Asn	Pro	Val	Gly	Thr	Gly	Phe	Ser	Tyr	Val	Asn	Gly	Ser	Gly
		115					120					125			
Ala	Tyr	Ala	Lys	Asp	Leu	Ala	Met	Val	Ala	Ser	Asp	Met	Met	Val	Leu
	130					135					140				
Leu	Lys	Thr	Phe	Phe	Ser	Cys	His	Lys	Glu	Phe	Gln	Thr	Val	Pro	Phe
145					150					155					160
Tyr	Ile	Phe	Ser	Glu	Ser	Tyr	Gly	Gly	Lys	Met	Ala	Ala	Gly	Ile	Gly
				165					170					175	
Leu	Glu	Leu	Tyr	Lys	Ala	Ile	Gln	Arg	Gly	Thr	Ile	Lys	Cys	Asn	Phe
		180						185					190		
Ala	Gly	Val	Ala	Leu	Gly	Asp	Ser	Trp	Ile	Ser	Pro	Val	Asp	Ser	Val
		195					200					205			
Leu	Ser	Trp	Gly	Pro	Tyr	Leu	Tyr	Ser	Met	Ser	Leu	Leu	Glu	Asp	Lys
	210					215					220				
Gly	Leu	Ala	Glu	Val	Ser	Lys	Val	Ala	Glu	Gln	Val	Leu	Asn	Ala	Val
225					230					235					240
Asn	Lys	Gly	Leu	Tyr	Arg	Glu	Ala	Thr	Glu	Leu	Trp	Gly	Lys	Ala	Glu
				245					250					255	
Met	Ile	Ile	Glu	Gln	Asn	Thr	Asp	Gly	Val	Asn	Phe	Tyr	Asn	Ile	Leu
		260						265					270		
Thr	Lys	Ser	Thr	Pro	Thr	Ser	Thr	Met	Glu	Ser	Ser	Leu	Glu	Phe	Thr
		275					280					285			
Gln	Ser	His	Leu	Val	Cys	Leu	Cys	Gln	Arg	His	Val	Arg	His	Leu	Gln
		290					295				300				
Arg	Asp	Ala	Leu	Ser	Gln	Leu	Met	Asn	Gly	Pro	Ile	Arg	Lys	Lys	Leu
305					310					315					320
Lys	Ile	Ile	Pro	Glu	Asp	Gln	Ser	Trp	Gly	Gly	Gln	Ala	Thr	Asn	Val

325 330 335  
Phe Val Asn Met Glu Glu Asp Phe Met Lys Pro Val Ile Asp Ile Val  
340 345 350  
Asp Thr Leu Leu Glu Ala Gly Val Asn Val Thr Val Tyr Asn Gly Gln  
355 360 365  
Leu Asp Leu Ile Val Asp Thr Ile Gly Gln Glu Ala Trp Val Arg Lys  
370 375 380  
Leu Lys Trp Pro Glu Leu Ser Arg Phe Asn Gln Leu Lys Trp Lys Ala  
385 390 395 400  
Leu Tyr Ser Asp Pro Lys Ser Leu Glu Thr Ser Ala Phe Val Lys Ser  
405 410 415  
Tyr Lys Asn Leu Ala Phe Tyr Trp Ile Leu Lys Ala Gly His Met Val  
420 425 430  
Pro Ser Asp Gln Gly Asp Met Ala Leu Lys Met Met Arg Leu Val Thr  
435 440 445  
Gln Gln Glu  
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&lt;210&gt; 2879

&lt;211&gt; 1352

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2879

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1352

&lt;210&gt; 2880

&lt;211&gt; 376

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2880

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Glu	Gly	Leu	Thr	Val	Phe	Ser	Leu	Ala	Ser	Arg	Cys	Gln	Pro	Gly	Gly
			20					25					30		
Leu	Ile	Gln	Pro	Ala	Asn	His	Val	Leu	Pro	Ala	Ser	Phe	Gly	Asn	Ser
		35					40					45			
Asp	Trp	Tyr	Leu	Val	Thr	Gly	Ser	Ser	Leu	Thr	Cys	Thr	Pro	Gly	Pro
	50					55				60					
Ala	Arg	Gly	Glu	Arg	Pro	Pro	Arg	Leu	Gly	Leu	Pro	Thr	Pro	Gly	Val
65					70				75					80	
Pro	Val	Xaa	Asp	Lys	Tyr	Ala	Pro	Lys	Leu	Asp	Ser	Pro	Tyr	Phe	Arg
			85					90					95		
His	Ser	Ser	Val	Ser	Phe	Phe	Pro	Ser	Phe	Pro	Pro	Ala	Ile	Pro	Gly
			100					105					110		
Leu	Pro	Thr	Leu	Leu	Pro	His	Pro	Gly	Pro	Phe	Gly	Ser	Leu	Gln	Gly
	115						120					125			
Ala	Phe	Gln	Pro	Lys	Thr	Ser	Ser	Pro	Ile	Glu	Val	Ala	Arg	Arg	Ala
	130					135				140					
Gly	Ala	Val	His	Thr	Leu	Leu	Gln	Lys	Ala	Pro	Gly	Val	Ser	Asp	Pro
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Tyr	Arg	Ala	Val	Val	Lys	Lys	Pro	Gly	Arg	Trp	Cys	Ala	Val	His	Val
			165					170					175		
Gln	Ile	Ala	Trp	Gln	Ile	Tyr	Arg	His	Gln	Gln	Lys	Ile	Lys	Glu	Met
		180						185					190		
Gln	Leu	Asp	Pro	His	Lys	Leu	Glu	Val	Gly	Ala	Lys	Leu	Asp	Leu	Phe
	195						200					205			
Gly	Arg	Pro	Pro	Ala	Pro	Gly	Val	Phe	Ala	Gly	Phe	His	Tyr	Pro	Gln
	210					215					220				
Asp	Leu	Ala	Arg	Pro	Leu	Phe	Pro	Ser	Thr	Gly	Ala	Ala	His	Pro	Ala
225					230					235				240	
Ser	Asn	Pro	Phe	Gly	Pro	Ser	Ala	His	Pro	Gly	Ser	Phe	Leu	Pro	Thr

245 250 255  
Gly Pro Leu Thr Asp Pro Phe Ser Arg Pro Ser Thr Phe Gly Gly Leu  
260 265 270  
Gly Ser Leu Ser Ser His Ala Phe Gly Gly Leu Gly Ser His Ala Leu  
275 280 285  
Ala Pro Gly Gly Ser Ile Phe Ala Pro Lys Glu Gly Ser Ser Val Leu  
290 295 300  
Gly Leu Pro Ser Pro His Glu Ala Trp Ser Arg Leu His Arg Ala Pro  
305 310 315 320  
Pro Ser Phe Pro Ala Pro Pro Pro Trp Pro Lys Ser Val Asp Ala Glu  
325 330 335  
Arg Val Ser Ala Leu Thr Asn His Asp Arg Glu Pro Val Asn Gly Lys  
340 345 350  
Glu Glu Gln Glu Arg Asp Leu Leu Glu Lys Thr Arg Leu Leu Ser Arg  
355 360 365  
Ala Ser Pro Ala Thr Pro Ala Gly  
370 375

&lt;210&gt; 2881

&lt;211&gt; 3021

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2881

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<213> Homo sapiens

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35 40 45  
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 <213> Homo sapiens

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&lt;210&gt; 2886

&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2886

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Gly	Arg	Asp	Ala	Glu	Thr	Leu	Gln	Lys	Gln	Lys	Glu	Thr	Ile	Lys	Ala
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Phe	Leu	Lys	Lys	Leu	Glu	Ala	Leu	Ile	Ala	Ser	Asn	Asp	Asn	Ala	Asn
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Lys	Thr	Cys	Lys	Met	Met	Leu	Ala	Thr	Glu	Glu	Thr	Ser	Pro	Asp	Leu
65				70					75					80	
Val	Gly	Ile	Lys	Arg	Asp	Leu	Glu	Ala	Leu	Ser	Lys	Gln	Cys	Asn	Lys
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Leu	Leu	Asp	Arg	Ala	Gln	Ala	Arg	Glu	Glu	Gln	Val	Glu	Gly	Thr	Ile
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<210> 2887
<211> 1945
<212> DNA
<213> Homo sapiens
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&lt;210&gt; 2888

&lt;211&gt; 315

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2888

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210 215 220  
Gly Tyr Leu Gln Arg Glu Ser Lys Phe Phe Glu His Phe Ile Glu Gly  
225 230 235 240  
Gly Arg Thr Val Lys Glu Phe Cys Gln Gln Glu Val Glu Pro Met Cys  
245 250 255  
Lys Glu Ser Asp His Ile His Ile Ile Ala Leu Ala Gln Ala Leu Ser  
260 265 270  
Val Ser Ile Gln Val Glu Tyr Met Asp Arg Gly Glu Gly Gly Thr Thr  
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Tyr Arg Pro Gly His Tyr Asp Ile Leu Tyr Lys  
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<211> 614  
<212> DNA  
<213> Homo sapiens

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<210> 2890  
<211> 204  
<212> PRT  
<213> Homo sapiens

<400> 2890  
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Lys Ala Glu Gln Ala Glu Gly Met Glu Phe Gly Phe Lys Met Pro Lys
50       55       60
Met Thr Met Pro Lys Leu Gly Arg Ala Glu Ser Pro Ser Arg Gly Lys
65       70       75       80
Pro Gly Glu Ala Gly Ala Glu Val Ser Gly Lys Leu Val Thr Leu Pro
85       90       95
Cys Leu Gln Pro Glu Val Asp Gly Glu Ala His Val Gly Val Pro Ser
100      105      110
Leu Thr Leu Pro Ser Val Glu Leu Asp Leu Pro Gly Ala Leu Gly Leu
115      120      125
Gln Gly Gln Val Pro Ala Ala Lys Met Gly Lys Gly Glu Arg Ala Glu
130      135      140
Gly Pro Glu Val Ala Ala Gly Val Arg Glu Val Gly Phe Arg Val Pro
145      150      155      160
Ser Val Glu Ile Val Thr Pro Gln Leu Pro Ala Val Glu Ile Glu Glu
165      170      175
Gly Arg Leu Glu Met Ile Glu Thr Lys Val Lys Pro Ser Ser Lys Phe
180      185      190
Ser Leu Pro Lys Phe Gly Leu Ser Gly Pro Lys Val
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&lt;210&gt; 2891

&lt;211&gt; 565

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2891

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&lt;210&gt; 2892

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<212> PRT  
<213> Homo sapiens

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Ser Thr Ser Tyr Arg Lys Ala Leu Pro Ile Leu Arg Pro Ser Ser Arg  
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Arg Glu Ala Gly Pro Leu His His Ile Asp Leu Arg Arg Cys Phe Ser  
50 55 60  
Arg Leu Gly Arg Gly Ala Asp Phe Ala Val Cys Ala Lys Glu Pro Val  
65 70 75 80  
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<210> 2893  
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<212> DNA  
<213> Homo sapiens

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&lt;210&gt; 2894

&lt;211&gt; 490

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2894

Met Phe Ile Ser Leu Gly Gly Ala Pro Asp Arg Gln Ser Leu Phe Pro

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Gln	Leu	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Ser	Ala	Arg	Gly	Tyr	Cys	Arg
		20		25		30									
Gln	Val	Ser	Val	Ser	Leu	His	Pro	Gly	Thr	Gly	Leu	Phe	Ser	Pro	Phe
		35		40		45									
Cys	Ser	Val	Pro	Leu	Trp	Cys	Ile	Tyr	Phe	Leu	Ser	Phe	Cys	Ile	Val
		50		55		60									
Leu	Ser	Leu	Pro	Ser	Ala	Ser	Leu	His	Leu	Cys	Leu	Ser	Cys	Leu	His
65				70		75									80
Phe	Leu	Asn	Leu	Asp	Cys	Pro	Cys	Leu	Phe	Leu	Cys	His	Ser	Leu	Ser
			85			90									95
Ser	Pro	Ser	Val	Cys	Gly	Ser	Ala	Ser	Leu	Ser	His	Ser	Pro	Tyr	Asn
			100			105									110
Trp	Pro	Leu	Pro	Ala	Gln	Thr	Phe	Leu	Asp	Glu	Leu	His	Glu	Thr	Gly
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Gln	Leu	His	Ser	Met	Ser	Thr	Trp	Met	Glu	Leu	Tyr	Pro	Ala	Val	Ser
		130				135									140
Thr	Asp	Val	Arg	Phe	Ala	Asn	Met	Leu	Gly	Gln	Pro	Gly	Ser	Thr	Pro
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Leu	Asp	Leu	Phe	Lys	Phe	Tyr	Val	Glu	Glu	Leu	Lys	Ala	Arg	Phe	His
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Asp	Glu	Lys	Lys	Ile	Ile	Lys	Asp	Ile	Leu	Lys	Asp	Arg	Gly	Phe	Cys
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Val	Glu	Val	Asn	Thr	Ala	Phe	Glu	Asp	Phe	Ala	His	Val	Ile	Ser	Phe
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Asp	Lys	Arg	Ala	Ala	Ala	Leu	Asp	Ala	Gly	Asn	Ile	Lys	Leu	Thr	Phe
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Asn	Ser	Leu	Leu	Glu	Lys	Ala	Glu	Ala	Arg	Glu	Arg	Glu	Arg	Glu	Lys
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Glu	Glu	Ala	Arg	Arg	Met	Arg	Arg	Arg	Glu	Ala	Ala	Phe	Arg	Ser	Met
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Leu	Arg	Gln	Ala	Val	Pro	Ala	Leu	Glu	Leu	Gly	Thr	Ala	Trp	Glu	Glu
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Val	Arg	Glu	Arg	Phe	Val	Cys	Asp	Ser	Ala	Phe	Glu	Gln	Ile	Thr	Leu
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Glu	Ser	Glu	Arg	Ile	Arg	Leu	Phe	Arg	Glu	Phe	Leu	Gln	Val	Leu	Glu
		290				295									300
Thr	Glu	Cys	Gln	His	Leu	His	Thr	Lys	Gly	Arg	Lys	His	Gly	Arg	Lys
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Gly	Lys	Lys	His	His	His	Lys	Arg	Ser	His	Ser	Pro	Ser	Gly	Ser	Glu
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Ser	Glu	Glu	Glu	Glu	Leu	Pro	Pro	Pro	Ser	Leu	Arg	Pro	Pro	Lys	Arg
		340				345									350
Arg	Arg	Arg	Asn	Pro	Ser	Glu	Ser	Gly	Ser	Glu	Pro	Ser	Ser	Ser	Leu
		355				360									365
Asp	Ser	Val	Glu	Ser	Gly	Gly	Ala	Ala	Leu	Gly	Gly	Arg	Gly	Ser	Pro
		370				375									380
Ser	Ser	His	Leu	Leu	Gly	Ala	Asp	His	Gly	Leu	Arg	Lys	Ala	Lys	Lys
385				390		395									400
Pro	Lys	Lys	Lys	Thr	Lys	Lys	Arg	Arg	His	Lys	Ser	Asn	Ser	Pro	Glu
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Ser	Glu	Thr	Asp	Pro	Glu	Glu	Lys	Ala	Gly	Lys	Glu	Ser	Asp	Glu	Lys
		420				425									430
Glu	Gln	Glu	Gln	Asp	Lys	Asp	Arg	Glu	Leu	Gln	Gln	Ala	Glu	Leu	Pro

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Asn	Arg	Ser	Pro	Gly	Phe	Gly	Ile	Lys	Lys	Glu	Lys	Thr	Gly	Trp	Asp
	450		455		460										
Thr	Ser	Glu	Ser	Glu	Leu	Ser	Glu	Gly	Glu	Leu	Glu	Arg	Arg	Arg	Arg
465			470		475									480	
Thr	Leu	Leu	Gln	Gln	Leu	Asp	Asp	His	Gln						
			485		490										

&lt;210&gt; 2895

&lt;211&gt; 697

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2895

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&lt;210&gt; 2896

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2896

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		20					25					30			
Pro	Leu	Arg	Gly	Pro	Ser	Ala	Thr	Ser	Ser	Cys	Arg	Gly	Gly	Asn	Ala
		35				40				45					
Pro	Gln	Gly	Leu	Gln	Lys	Gly	Gly	Gly	Glu	Ala	Pro	Val	Leu	Leu	Leu
	50				55			60							
Gln	Glu	Leu	Ala	Gln	Asp	Ala	Val	Ala	Pro	Ala	Val	Ala	Arg	Arg	Ser



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				85					90					95	
Leu	Pro	Pro	Asp	Arg	Pro	Arg	Pro	Pro	Ala	Arg	Arg	His	Ser	Phe	Arg
			100					105				110			
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		115					120				125				
Pro	Leu	Leu	Arg	Pro	Pro	Val	Ala	Ala	Ala	Leu	Pro	Pro	Gln	Pro	Ala
		130				135					140				
Pro	Ser	Leu	Pro	Ala	Ser	Arg	Ala	His	Ser	Cys	Pro	Gly	Arg	Pro	Arg
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Leu	Gly	Gly	Val	Glu	Gln	Pro	Leu	Glu	Val	Leu	Gly	Asp	Ala		
			165						170						

&lt;210&gt; 2897

&lt;211&gt; 3184

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2897

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<211> 933  
<212> PRT  
<213> Homo sapiens

<400> 2898  
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Asn Glu Cys Val Gln Cys Glu Phe Asn Phe Ile Asn Thr Gly Lys Phe  
35 40 45  
Thr Phe Ser Phe Gln Ala Gln Leu Cys Gly Ser Lys Thr Leu Leu Gln  
50 55 60  
Tyr Leu Glu Phe Ser Pro Ile Asp Ser Thr Val Asp Val Gly Gln Ser  
65 70 75 80  
Val His Ala Thr Leu Ser Phe Gln Pro Leu Lys Lys Cys Val Leu Thr  
85 90 95  
Asp Leu Glu Leu Ile Ile Lys Ile Ser His Gly Pro Thr Phe Met Cys  
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Asn Ile Ser Gly Cys Ala Val Ser Pro Ala Ile His Phe Ser Phe Thr  
115 120 125  
Ser Tyr Asn Phe Gly Thr Cys Phe Ile Tyr Gln Ala Gly Met Pro Pro  
130 135 140  
Tyr Lys Gln Thr Leu Val Ile Thr Asn Lys Glu Glu Thr Pro Met Ser  
145 150 155 160  
Ile Asp Cys Leu Tyr Thr Asn Thr Thr His Leu Glu Val Asn Ser Arg  
165 170 175  
Val Asp Val Val Lys Pro Gly Asn Thr Leu Glu Ile Pro Ile Thr Phe  
180 185 190  
Tyr Pro Arg Glu Ser Ile Asn Tyr Gln Glu Leu Ile Pro Phe Glu Ile  
195 200 205  
Asn Gly Leu Ser Gln Gln Thr Val Glu Ile Lys Gly Lys Gly Thr Glu

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	245	250
Asn Ser Leu Ala Gln Leu Thr Phe Asn Gln Ser Ile Leu Phe Thr Ile		255
	260	265
Pro Glu Leu Gln Glu Pro Lys Val Leu Thr Leu Ala Pro Phe His Asn		270
	275	280
Ile Thr Leu Lys Pro Lys Glu Val Cys Lys Leu Glu Val Ile Phe Ala		285
	290	295
Pro Lys Lys Arg Val Pro Pro Phe Ser Glu Glu Val Phe Met Glu Cys		300
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Met Gly Leu Leu Arg Pro Leu Phe Leu Leu Ser Gly Cys Cys Gln Ala		320
	325	330
Leu Glu Ile Ser Leu Asp Gln Glu His Ile Pro Phe Gly Pro Val Val		335
	340	345
Tyr Gln Thr Gln Ala Thr Arg Arg Ile Leu Met Leu Asn Thr Gly Asp		350
	355	360
Val Gly Ala Arg Phe Lys Trp Asp Ile Lys Lys Phe Glu Pro His Phe		365
	370	375
Ser Ile Ser Pro Glu Glu Gly Tyr Ile Thr Ser Gly Met Glu Val Ser		380
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Phe Glu Val Thr Tyr His Pro Thr Glu Val Gly Lys Glu Ser Leu Cys		400
	405	410
Lys Asn Ile Leu Cys Tyr Ile Gln Gly Gly Ser Pro Leu Ser Leu Thr		415
	420	425
Leu Ser Gly Val Cys Val Gly Pro Pro Ala Val Lys Glu Val Val Asn		430
	435	440
Phe Thr Cys Gln Val Arg Ser Lys His Thr Gln Thr Ile Leu Leu Ser		445
	450	455
Asn Arg Thr Asn Gln Thr Trp Asn Leu His Pro Ile Phe Glu Gly Glu		460
465	470	475
His Trp Glu Gly Pro Glu Phe Ile Thr Leu Glu Ala His Gln Gln Asn		480
	485	490
Lys Pro Tyr Glu Ile Thr Tyr Arg Pro Arg Thr Met Asn Leu Glu Asn		495
	500	505
Arg Lys His Gln Gly Thr Leu Phe Phe Pro Leu Pro Asp Gly Thr Gly		510
	515	520
Trp Leu Tyr Ala Leu His Gly Thr Ser Glu Leu Pro Lys Ala Val Ala		525
	530	535
Asn Ile Tyr Arg Glu Val Pro Cys Lys Thr Pro Tyr Thr Glu Leu Leu		540
545	550	555
Pro Ile Thr Asn Trp Leu Asn Lys Pro Gln Arg Phe Arg Val Ile Val		560
	565	570
Glu Ile Leu Lys Pro Glu Lys Pro Asp Leu Ser Ile Thr Met Lys Gly		575
	580	585
Leu Asp Tyr Ile Asp Val Leu Ser Gly Ser Lys Lys Asp Tyr Lys Leu		590
	595	600
Asn Phe Phe Ser His Lys Glu Gly Thr Tyr Ala Ala Lys Val Ile Phe		605
	610	615
Arg Asn Glu Val Thr Asn Glu Phe Leu Tyr Tyr Asn Val Ser Phe Arg		620
625	630	635
Val Ile Pro Ser Gly Ile Ile Lys Thr Ile Glu Met Val Thr Pro Val		640

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 660 665 670  
 Ser Val Thr Phe Ser Thr Glu Cys Arg Met Pro Asp Ile Ala Leu Pro  
 675 680 685  
 Ser Gln Phe Val Val Pro Ala Asn Ser Glu Gly Thr Phe Ser Phe Glu  
 690 695 700  
 Phe Gln Pro Leu Lys Ala Gly Glu Thr Phe Gly Arg Leu Thr Leu His  
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 Pro Ala Leu Pro Glu Lys Pro Val His Phe Gln Thr Val Leu Gly Ser  
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 Val Leu Phe Glu Pro Ser His Leu Gly Glu Thr Lys Gly Ile Leu Ile  
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 820 825 830  
 Ala Leu Pro Pro Lys Pro Gln Gly Pro Phe Ser Ile Arg Ala Gly Tyr  
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 Ser Ile Ile Ile Pro Phe Lys Asn Val Phe Tyr His Met Val Thr Phe  
 850 855 860  
 Ser Ile Ile Val Asp Asn Pro Ala Phe Thr Ile Arg Ala Gly Glu Ser  
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&lt;210&gt; 2899

&lt;211&gt; 876

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2899

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720  
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876

<210> 2900  
<211> 189  
<212> PRT  
<213> Homo sapiens

<400> 2900  
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20 25 30  
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35 40 45  
Tyr Lys Asn Gln Glu Leu Arg Ile Lys Phe Pro Asp Asn Pro Glu Lys  
50 55 60  
Phe Met Glu Ser Glu Leu Asp Leu Asn Asp Ile Ile Gln Glu Met His  
65 70 75 80  
Val Val Ala Thr Met Pro Asp Leu Tyr His Leu Leu Val Glu Leu Asn  
85 90 95  
Ala Val Gln Ser Leu Leu Gly Leu Leu Gly His Asp Asn Thr Asp Val  
100 105 110  
Ser Ile Ala Val Val Asp Leu Leu Gln Glu Leu Thr Asp Ile Asp Thr  
115 120 125  
Leu His Glu Ser Glu Glu Gly Ala Glu Val Leu Ile Asp Ala Leu Val  
130 135 140  
Asp Gly Gln Val Val Ala Leu Leu Val Gln Asn Leu Glu Arg Leu Asp  
145 150 155 160  
Glu Ser Val Lys Glu Glu Ala Asp Gly Val His Asn Thr Leu Ala Ile  
165 170 175  
Val Glu Asn Met Ala Glu Phe Arg Pro Glu Met Cys Thr  
180 185

<210> 2901  
<211> 756

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2901

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180  
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240  
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360  
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420  
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480  
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756

&lt;210&gt; 2902

&lt;211&gt; 158

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2902

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			20					25					30		
Glu	Ser	Leu	Glu	Glu	Glu	Glu	Ala	Leu	Asp	Pro	Leu	Gly	Ile	Met	Arg
		35					40					45			
Ser	Lys	Lys	Pro	Lys	Lys	His	Pro	Lys	Val	Ala	Val	Lys	Ala	Lys	Pro
	50					55				60					
Ser	Pro	Arg	Leu	Thr	Ile	Phe	Asp	Glu	Glu	Val	Asp	Pro	Asp	Glu	Gly
65					70				75					80	
Leu	Phe	Gly	Pro	Gly	Arg	Lys	Leu	Ser	Pro	Gln	Asp	Pro	Ser	Glu	Asp
			85					90						95	
Val	Ser	Ser	Met	Asp	Pro	Leu	Lys	Leu	Phe	Asp	Asp	Pro	Asp	Leu	Gly
			100					105					110		
Gly	Ala	Ile	Pro	Leu	Gly	Asp	Ser	Leu	Leu	Leu	Pro	Ala	Ala	Cys	Glu
		115				120					125				
Ser	Gly	Gly	Pro	Thr	Pro	Ser	Leu	Ser	His	Arg	Asp	Ala	Ser	Lys	Glu

130 135 140  
Leu Phe Arg Tyr His Leu Ser Pro Ala Ala Leu Gly Gln Leu  
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<210> 2903  
<211> 542  
<212> DNA  
<213> Homo sapiens

<400> 2903  
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120  
gactcacaga acctcagtgc ctacaacacc cggctcttca aagaggtcga tggagaaggg  
180  
aagccctact acgagggtgcg gctggcttct gtgcttggct cagagccttc cctggactct  
240  
gaggtgactt ccaagctgaa gagctatgaa ttccggggaa gccctttcca ggtgaccggt  
300  
ggggactacg cgcccatcct ccagaagggtg gtggagcagc tggagaaagc caaggcctat  
360  
gcagccaaca gccaccaggg gcagatgctg gccaggtata tagagagctt caccagggc  
420  
tccatcgagg ccacaagag gggctcccg cttctggatcc aggacaaagg ccccatcgt  
480  
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gt  
542

<210> 2904  
<211> 180  
<212> PRT  
<213> Homo sapiens

<400> 2904  
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Lys Glu Gly Ile Thr Thr Tyr Phe Ser Gly Asn Cys Thr Met Glu Asp  
20 25 30  
Ala Lys Leu Ala Gln Asp Phe Leu Asp Ser Gln Asn Leu Ser Ala Tyr  
35 40 45  
Asn Thr Arg Leu Phe Lys Glu Val Asp Gly Glu Gly Lys Pro Tyr Tyr  
50 55 60  
Glu Val Arg Leu Ala Ser Val Leu Gly Ser Glu Pro Ser Leu Asp Ser  
65 70 75 80  
Glu Val Thr Ser Lys Leu Lys Ser Tyr Glu Phe Arg Gly Ser Pro Phe  
85 90 95  
Gln Val Thr Arg Gly Asp Tyr Ala Pro Ile Leu Gln Lys Val Val Glu  
100 105 110  
Gln Leu Glu Lys Ala Lys Ala Tyr Ala Ala Asn Ser His Gln Gly Gln  
115 120 125  
Met Leu Ala Gln Tyr Ile Glu Ser Phe Thr Gln Gly Ser Ile Glu Ala



130                      135                      140  
 His Lys Arg Gly Ser Arg Phe Trp Ile Gln Asp Lys Gly Pro His Arg  
 145                      150                      155                      160  
 Gly Glu Val Arg Arg Gln Leu His Pro Thr Cys Pro Leu Leu Pro Ala  
                          165                      170                      175  
 Pro Pro Ser Arg  
                          180

<210> 2905  
 <211> 814  
 <212> DNA  
 <213> Homo sapiens

<400> 2905  
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 ggattcctcc tctgcccagg tttctgctgt cccccaaaa gaaagacatg tagctgggca  
 180  
 tgggtgtaca catctgtggt ccagttactc caggaggctg aggaggagg attgcttgag  
 240  
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 300  
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 480  
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 600  
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 660  
 gcctctgtgg aggtaacat tgggggttcg cctccaaatc caggaatgca cctcaaaaat  
 720  
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 814

<210> 2906  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 2906  
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 1                      5                      10                      15  
 Asn Arg Ile Pro Val Thr Arg Ser Phe Phe Cys Ile Thr Asn Ser Ala  
                          20                      25                      30  
 Thr Leu Phe Gln Asn Trp Val Ser Gly Phe Leu Leu Cys Pro Gly Phe

```

      35      40      45
Cys Cys Pro Pro Lys Arg Lys Thr Cys Ser Trp Ala Trp Trp Tyr Thr
  50      55      60
Ser Val Val Pro Val Thr Gln Glu Ala Glu Ala Gly Gly Leu Leu Glu
  65      70      75      80
Pro Arg Cys Ser Arg Leu Gln Trp Ala Val Asn Ala Leu Leu His Ser
      85      90      95
Ser Leu Ser Asn Arg Ala Arg Pro Arg Pro Ser Ser Arg Leu Ser Ile
      100      105      110
Pro Pro Pro Gln His Pro Phe Leu Leu Glu Met Gly Phe Gly Val Val
      115      120      125
Asn Gln Ala Gln Gly Asn Leu Arg Gly Pro Ala Ser Ser Val Arg Cys
      130      135      140
Arg Arg Ser Thr Arg Pro Arg Pro Gly Ser Ala Arg Arg Glu Lys Ala
      145      150      155      160
Ala Thr Pro Gly Val Arg Glu Leu Arg Leu Glu Gly Ala Trp Gln Ala
      165      170      175
Gly Arg Gly Pro Gly Gly Gly Ser Ala Tyr Asp Arg Arg Trp Gly Glu
      180      185      190
Leu Leu Asp Val Lys Gly Pro Leu
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<210> 2907  
 <211> 379  
 <212> DNA  
 <213> Homo sapiens

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<400> 2907
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180
caaaggcaaa ggaattcttc ccttaatgtt ggacggctct gagactgtc caccctgggc
240
tcattacact gggaccagct ttaagcttcc ctgttcaacg cggagagctc cacagcccag
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360
cctggccgat gccaccggt
379

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<210> 2908  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

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<400> 2908
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  1      5      10      15
Met Thr Ala Ser Leu Asn Gly Trp Val Leu Arg Asn Ser Ile Phe Thr
      20      25      30
Phe Pro Arg Leu Leu Ser Asn Phe Gln His Cys Pro Gln Asp Tyr Lys

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35 40 45  
Gly Lys Gly Ile Leu Pro Leu Met Leu Asp Gly Pro Glu Thr Ala Pro  
50 55 60  
Pro Trp Ala His Tyr Thr Gly Thr Ser Phe Lys Leu Pro Cys Ser Thr  
65 70 75 80  
Arg Arg Ala Pro Gln Pro Arg Thr Thr Glu Gln Met Met Ala Arg Arg  
85 90 95  
Pro Gln Asn Pro Asp Arg Pro Ser Trp Leu Ala Leu Ala Asp Ala Thr  
100 105 110  
Gly

<210> 2909  
<211> 2420  
<212> DNA  
<213> Homo sapiens

<400> 2909  
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120  
cattgggccc ctgtgagcgg gacggtggct gagaccgcct gctgtggcct tgcgagttct  
180  
ctgcactcac tggcaggggt ttggtgggaa acggggaagc tttggcatgg ttctgtccag  
240  
ttgcttataa tcaagaataa tgagttttga ggtttacaaa gagcagaagt aacatttata  
300  
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360  
tttaaaggaa tgataatttg tacttactgt ttatggggac tagatatatt agaattatag  
420  
catcattatg gggacatagt gtttccctat aaattcagaa attctctgggt tgatgtaaaa  
480  
tcatacttcc tggttttact taattagtaa agaaataaat aaattagagt aacatttagt  
540  
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660  
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720  
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780  
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840  
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1260  
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1380  
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1680  
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2040  
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2100  
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2160  
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2280  
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2340  
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2400  
aatatgtaga aaaatagcca  
2420

&lt;210&gt; 2910

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2910

Met Gly Thr Glu Gly Ser Lys Gly Gly Ile Arg Ser Ala Pro Lys Pro

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Pro Cys Thr Thr Ser Asn Ala Gly Val Trp Leu Leu Leu Leu His Arg
      20           25           30
Thr Glu Pro Pro Val Phe Cys Leu Arg Ala Ser Phe Met Ala Trp Thr
      35           40           45
Gly Asn Ala Met Cys Ser His Lys Cys Thr Thr Ile Val His Gln His
      50           55           60
Leu Tyr Asn Ile Lys Gly Val Ile Tyr Lys Ser Thr Ala Ile Val His
      65           70           75           80
Arg Met Val Met Ala Gly Glu Pro Arg Pro Pro Val Leu Cys Ser Phe
      85           90           95
Ser Thr Gly Glu His Leu Gly Ser Cys His Lys Ala Arg Gly Gly Pro
      100          105          110
Ser Leu Gly Leu Ser Trp Gly Arg Gln Gln Val Cys Lys Asp Ser Ser
      115          120          125
Gly Pro Val Leu Thr Gly Ile Arg Gly Gln Glu Arg Gln Val Cys Leu
      130          135          140
Cys Leu Gly Leu Ile Gly Arg Leu Val
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<210> 2911  
 <211> 1327  
 <212> DNA  
 <213> Homo sapiens

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300
cagttactga aactagaaac caatgaattc caacaacttc aaagtaaaat cagtttaatt
360
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420
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480
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540
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600
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660
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720
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780
caaagaatta actctgttaa gaagacgcta accgaactaa agagtgactt cgacaaacat
840

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acagatagat ttctaagctt agaagggtgac agagccaaag ttctgaagac agtgactttt  
 900  
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 960  
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 1020  
 aaagaaattg ctttcttaag tgaaaaaata tctaatttaa caatagtcca agctgagatt  
 1080  
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 1140  
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 1200  
 aatgatattt tggagcaaaa gtcattttat atttaatcct attttgtaca gtaaaaaata  
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 1320  
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 1327

<210> 2912

<211> 350

<212> PRT

<213> Homo sapiens

<400> 2912

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Ala	Ala	Glu	Pro	Gly	Lys	Arg	Ser	Glu	Gly	Gly	Lys	Thr	Pro	Val	Ala
			20					25					30		
Arg	Ser	Ser	Gly	Gly	Gly	Gly	Trp	Ala	Asp	Pro	Arg	Thr	Cys	Leu	Ser
			35				40					45			
Leu	Leu	Ser	Leu	Gly	Thr	Cys	Leu	Gly	Leu	Ala	Trp	Phe	Val	Phe	Gln
			50			55				60					
Gln	Ser	Glu	Lys	Phe	Ala	Lys	Val	Glu	Asn	Gln	Tyr	Gln	Leu	Leu	Lys
65					70				75					80	
Leu	Glu	Thr	Asn	Glu	Phe	Gln	Gln	Leu	Gln	Ser	Lys	Ile	Ser	Leu	Ile
			85					90						95	
Ser	Glu	Lys	Trp	Gln	Lys	Ser	Glu	Ala	Ile	Met	Glu	Gln	Leu	Lys	Ser
			100					105					110		
Phe	Gln	Ile	Ile	Ala	His	Leu	Lys	Arg	Leu	Gln	Glu	Glu	Ile	Asn	Glu
			115				120						125		
Val	Lys	Thr	Trp	Ser	Asn	Arg	Ile	Thr	Glu	Lys	Gln	Asp	Ile	Leu	Asn
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Asn	Ser	Leu	Thr	Thr	Leu	Ser	Gln	Asp	Ile	Thr	Lys	Val	Asp	Gln	Ser
145					150					155				160	
Thr	Thr	Ser	Met	Ala	Lys	Asp	Val	Gly	Leu	Lys	Ile	Thr	Ser	Val	Lys
			165					170						175	
Thr	Asp	Ile	Arg	Arg	Ile	Ser	Gly	Leu	Val	Thr	Asp	Val	Ile	Ser	Leu
			180					185					190		
Thr	Asp	Ser	Val	Gln	Glu	Leu	Glu	Asn	Lys	Ile	Glu	Lys	Val	Glu	Lys
			195				200					205			
Asn	Thr	Val	Lys	Asn	Ile	Gly	Asp	Leu	Leu	Ser	Ser	Ser	Ile	Asp	Arg
210					215					220					
Thr	Ala	Thr	Leu	Arg	Lys	Thr	Ala	Ser	Glu	Asn	Ser	Gln	Arg	Ile	Asn

225                    230                    235                    240  
Ser Val Lys Lys Thr Leu Thr Glu Leu Lys Ser Asp Phe Asp Lys His  
                         245                    250                    255  
Thr Asp Arg Phe Leu Ser Leu Glu Gly Asp Arg Ala Lys Val Leu Lys  
                         260                    265                    270  
Thr Val Thr Phe Ala Asn Asp Leu Lys Pro Lys Val Tyr Asn Leu Lys  
                         275                    280                    285  
Lys Asp Phe Ser Arg Leu Glu Pro Leu Val Asn Asp Leu Thr Leu Arg  
                         290                    295                    300  
Ile Gly Arg Leu Val Thr Asp Leu Leu Gln Arg Glu Lys Glu Ile Ala  
305                    310                    315                    320  
Phe Leu Ser Glu Lys Ile Ser Asn Leu Thr Ile Val Gln Ala Glu Ile  
                         325                    330                    335  
Lys Asp Ile Lys Asp Glu Ile Ala His Ile Ser Asp Met Asn  
                         340                    345                    350

&lt;210&gt; 2913

&lt;211&gt; 361

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2913

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&lt;210&gt; 2914

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2914

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Trp Val Met Ile Ser Lys Arg Trp Thr Arg Glu Ala Leu Asp Gly Phe  
                         20                    25                    30  
Cys Asn Met Glu Ile Gly Ile Ile Ile Arg Asn Gly Ser Gln Asp Gly  
                         35                    40                    45  
Pro Glu Pro Ser Ile Ser Gly Leu Lys Lys Leu His Pro Gln Leu Ser  
                         50                    55                    60  
Leu Ser Glu Asp Val His Ala Pro Gln Val Ala Asn Asp Thr Glu Ala  
65                    70                    75                    80  
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<213> Homo sapiens

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&lt;210&gt; 2916

&lt;211&gt; 519

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2916

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			20					25					30		
Ile	Gln	Glu	Val	Glu	Leu	Lys	Ala	Ser	Ala	Ala	Asp	Arg	Glu	Ile	Tyr
			35					40					45		
Leu	Leu	Arg	Thr	Ser	Leu	His	Arg	Glu	Arg	Glu	Gln	Ala	Gln	Gln	Leu
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His	Gln	Leu	Leu	Ala	Leu	Lys	Glu	Gln	Glu	His	Arg	Lys	Glu	Leu	Glu
65						70				75				80	
Thr	Arg	Glu	Phe	Phe	Thr	Asp	Ala	Asp	Phe	Gln	Asp	Ala	Leu	Ala	Lys
				85					90					95	
Glu	Ile	Ala	Lys	Glu	Glu	Lys	Lys	His	Glu	Gln	Met	Ile	Lys	Glu	Tyr
			100					105					110		
Gln	Glu	Lys	Ile	Asp	Val	Leu	Ser	Gln	Gln	Tyr	Met	Asp	Leu	Glu	Asn
			115					120					125		
Glu	Phe	Arg	Ile	Ala	Leu	Thr	Val	Glu	Ala	Arg	Arg	Phe	Gln	Asp	Val
			130					135				140			
Lys	Asp	Gly	Phe	Glu	Asn	Val	Ala	Thr	Glu	Leu	Ala	Lys	Ser	Lys	His
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Ala	Leu	Ile	Trp	Ala	Gln	Arg	Lys	Glu	Asn	Glu	Ser	Ser	Ser	Leu	Ile
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Lys	Asp	Leu	Thr	Cys	Met	Val	Lys	Glu	Gln	Lys	Thr	Lys	Leu	Ala	Glu
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Val	Ser	Lys	Leu	Lys	Gln	Glu	Thr	Ala	Ala	Asn	Leu	Gln	Asn	Gln	Ile
			195					200					205		
Asn	Thr	Leu	Glu	Ile	Leu	Ile	Glu	Asp	Asp	Lys	Gln	Lys	Ser	Ile	Gln
			210				215					220			
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Ile Ile Asp Asp Gln Thr Glu Thr Ile Arg Lys Leu Lys Asp Cys Leu
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Gln Glu Lys Asp Glu His Ile Lys Arg Leu Gln Glu Lys Ile Thr Glu
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Ile Glu Lys Cys Thr Gln Glu Gln Leu Asp Glu Lys Ser Ser Gln Leu
      340      345      350
Asp Glu Val Leu Glu Lys Leu Glu Arg His Asn Glu Arg Lys Glu Lys
      355      360      365
Leu Lys Gln Gln Leu Lys Gly Lys Glu Val Glu Leu Glu Glu Ile Arg
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Asn Lys Glu Lys Lys Leu Lys Ala Glu Arg Asp Lys Ser Ile Glu Leu
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Gln Lys Asn Ala Met Glu Lys Leu His Ser Met Asp Asp Ala Phe Lys
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Arg Gln Val Asp Ala Ile Val Glu Ala His Gln Ala Glu Ile Ala Gln
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Leu Ala Asn Glu Lys Gln Lys Cys Ile Asp Ser Ala Asn Leu Lys Val
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&lt;210&gt; 2917

&lt;211&gt; 2636

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2917

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<211> 509

<212> PRT

<213> Homo sapiens

<400> 2918

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Gln	Leu	Asp	Trp	Pro	Asp	Pro	Glu	Glu	Ala	Phe	Met	Ile	Thr	Val	Lys
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Phe	Val	Glu	Asp	Thr	Cys	Arg	Leu	Ala	Leu	Val	Tyr	Cys	Ser	Leu	Ile
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Lys	Ala	Arg	Ala	Arg	Glu	Leu	Ser	Ser	Gly	Gln	Lys	Asp	Gln	Gly	Gln
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Ala	Ala	Asn	Met	Leu	Cys	Val	Val	Val	Asn	Asp	Met	Glu	Gln	Leu	Arg
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Gln	Arg	Val	Gly	Ala	Val	Leu	Glu	Gln	Gly	Gln	Leu	Gln	Asn	Thr	Leu
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His	Ala	Gln	Leu	Gln	Ser	Ala	Leu	Ala	Gly	Leu	Gly	His	Glu	Ile	Arg
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Thr	Gly	Val	Arg	Thr	Leu	Ala	Glu	Gln	Leu	Glu	Val	Gly	Ile	Ala	Lys
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His	Ile	Gln	Lys	Leu	Val	Gly	Val	Arg	Glu	Ser	Val	Leu	Pro	Glu	Asp
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Ala	Ile	Leu	Pro	Leu	Met	Lys	Phe	Leu	Glu	Val	Glu	Leu	Cys	Tyr	Met

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Trp Thr His Thr Leu Thr Val Leu Val Glu Ala Ala Ala Ser Gln Arg		240
245	250	255
Ser Ser Ser Leu Ala Ser Asn Arg Leu Lys Ile Ala Leu Gln Asn Leu		
260	265	270
Glu Ile Cys Phe His Ala Glu Gly Cys Gly Leu Pro Pro Lys Ala Leu		
275	280	285
His Thr Ala Thr Phe Gln Ala Leu Gln Arg Asp Leu Glu Leu Gln Ala		
290	295	300
Ala Ser Ser Arg Glu Leu Ile Arg Lys Tyr Phe Cys Ser Arg Ile Gln		
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Gln Gln Ala Glu Thr Thr Ser Glu Glu Leu Gly Ala Val Thr Val Lys		320
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Ala Ser Ser Leu Leu Pro Leu Asp Ser Asn Gly Ser Ser Asp Pro Phe		
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Val Gln Leu Thr Leu Glu Pro Arg His Glu Phe Pro Glu Leu Ala Ala		
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Arg Glu Thr Gln Lys His Lys Lys Asp Leu His Pro Leu Phe Asp Glu		
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Thr Phe Glu Phe Leu Val Pro Ala Glu Pro Cys Arg Lys Ala Gly Ala		400
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Cys Leu Leu Leu Thr Val Leu Asp Tyr Asp Thr Leu Gly Ala Asp Asp		
420	425	430
Leu Glu Gly Glu Ala Phe Leu Pro Leu Arg Glu Val Pro Gly Leu Ser		
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Gly Ser Glu Glu Pro Gly Glu Val Pro Gln Thr Arg Leu Pro Leu Thr		
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Tyr Pro Ala Pro Asn Gly Asp Pro Ile Leu Gln Leu Leu Glu Gly Arg		
465	470	475
Lys Gly Asp Arg Glu Ala Gln Val Phe Val Arg Leu Arg Arg His Arg		480
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&lt;210&gt; 2919

&lt;211&gt; 455

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2919

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Cys Cys Gly Asn Gln Ala Ala Gly Asn Asp Ala Leu Gln Asp Val Leu  
50 55 60  
Ser Leu Leu Asn Asp Leu Ser Arg Ser His Ile Gly Lys Ala Ile Leu  
65 70 75 80  
Ser Gln Pro Ala Cys Val Ser Lys Leu Leu Ser Leu Leu Leu Asp Gln  
85 90 95  
Arg Pro Ser Pro Lys Leu Val Leu Ile Ile Leu Gln Leu Cys Arg Ala  
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1855

&lt;210&gt; 2922

&lt;211&gt; 452

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2922

Met Ala Ala Asp Gln Arg Pro Lys Ala Asp Thr Leu Ala Leu Arg Gln

1	5	10	15
Arg Leu Ile Ser Ser Ser Cys Arg Leu Phe Phe Pro Glu Asp Pro Val			
20	25	30	
Lys Ile Val Arg Ala Gln Gly Gln Tyr Met Tyr Asp Glu Gln Gly Ala			
35	40	45	
Glu Tyr Ile Asp Cys Ile Ser Asn Val Ala His Val Gly His Cys His			
50	55	60	
Pro Leu Val Val Gln Ala Ala His Glu Gln Asn Gln Val Leu Asn Thr			
65	70	75	80
Asn Ser Arg Tyr Leu His Asp Asn Ile Val Asp Tyr Ala Gln Arg Leu			
85	90	95	
Ser Glu Thr Leu Pro Glu Gln Leu Cys Val Phe Tyr Phe Leu Asn Ser			
100	105	110	
Gly Ser Glu Ala Asn Asp Leu Ala Leu Arg Leu Ala Arg His Tyr Thr			
115	120	125	
Gly His Gln Asp Val Val Val Leu Asp His Ala Tyr His Gly His Leu			
130	135	140	
Ser Ser Leu Ile Asp Ile Ser Pro Tyr Lys Phe Arg Asn Leu Asp Gly			
145	150	155	160
Gln Lys Glu Trp Val His Val Ala Pro Leu Pro Asp Thr Tyr Arg Gly			
165	170	175	
Pro Tyr Arg Xaa Arg Thr Thr Pro Thr Gln Leu Trp Xaa Tyr Ala Asn			
180	185	190	
Glu Val Lys Arg Val Val Ser Ser Ala Gln Glu Lys Gly Arg Lys Ile			
195	200	205	
Ala Ala Phe Phe Ala Glu Ser Leu Pro Ser Val Gly Gly Gln Ile Ile			
210	215	220	
Pro Pro Ala Gly Tyr Phe Ser Gln Val Ala Glu His Ile Arg Lys Ala			
225	230	235	240
Gly Gly Val Phe Val Ala Asp Glu Ile Gln Val Gly Phe Gly Arg Val			
245	250	255	
Gly Lys His Phe Trp Ala Phe Gln Leu Gln Gly Lys Asp Phe Val Pro			
260	265	270	
Asp Ile Val Thr Met Gly Lys Ser Ile Gly Asn Gly His Pro Val Ala			
275	280	285	
Cys Val Ala Ala Thr Gln Pro Val Ala Arg Ala Phe Glu Ala Thr Gly			
290	295	300	
Val Glu Tyr Phe Asn Thr Phe Gly Gly Ser Pro Val Ser Cys Ala Val			
305	310	315	320
Gly Leu Ala Val Leu Asn Val Leu Glu Lys Glu Gln Leu Gln Asp His			
325	330	335	
Ala Thr Ser Val Gly Ser Phe Leu Met Gln Leu Leu Trp Gln Gln Lys			
340	345	350	
Ile Arg His Pro Ile Val Gly Asp Val Arg Gly Val Gly Leu Phe Ile			
355	360	365	
Gly Val Asp Leu Ile Lys Asp Glu Ala Thr Arg Thr Pro Ala Thr Glu			
370	375	380	
Glu Ala Xaa Val Tyr Leu Val Ser Arg Leu Lys Glu Asn Tyr Val Leu			
385	390	395	400
Leu Ser Thr Asp Gly Pro Gly Arg Asn Ile Leu Lys Phe Lys Pro Pro			
405	410	415	
Met Cys Phe Ser Leu Asp Asn Ala Arg Gln Val Val Ala Lys Leu Asp			
420	425	430	
Ala Ile Leu Thr Asp Met Glu Glu Lys Val Arg Ser Cys Glu Thr Leu			



435 440 445  
Arg Leu Gln Pro  
450

<210> 2923  
<211> 572  
<212> DNA  
<213> Homo sapiens

<400> 2923  
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120  
tggagcccct cccccgtggg accaccctcc ttccagcaaa atgccggcca agctcaagga  
180  
gaaacagcgt ttattgtgga ggggagctgg gcggggctca gcctcggaga actggcagta  
240  
cagccgcccc agcctcggct ccacccatag ccggaacggg atctccagga tggcagagaa  
300  
gccttcagcc agcgttgggg cctcgaactg cttcctggca gtggtgggaa cagtgagggg  
360  
cagcctggat catgtggccc agccagtgcc cctgccccct gctatcccca acagtacctg  
420  
tagccataca tgaccatgtc tgacacgggg atatgagagg agtccgtcat ctctcgaaac  
480  
cggttgttgt ggcgcgcctg ctccagagtg gcggtgaaga ggaagcagcg gcaggggacg  
540  
cccgcggctc gggcacactg gacgtacctg gc  
572

<210> 2924  
<211> 91  
<212> PRT  
<213> Homo sapiens

<400> 2924  
Met Ser Leu Lys Pro Pro Pro Cys Lys Lys Leu Ala Gly Leu Glu Pro  
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Leu Pro Arg Gly Thr Thr Leu Leu Pro Ala Lys Cys Arg Pro Ser Ser  
20 25 30  
Arg Arg Asn Ser Val Tyr Cys Gly Gly Glu Leu Gly Gly Ala Gln Pro  
35 40 45  
Arg Arg Thr Gly Ser Thr Ala Ala Pro Ala Ser Ala Pro Pro Ile Ala  
50 55 60  
Gly Thr Gly Ser Pro Gly Trp Gln Arg Ser Leu Gln Pro Ala Leu Gly  
65 70 75 80  
Pro Arg Thr Ala Ser Trp Gln Trp Trp Glu Gln  
85 90

<210> 2925  
<211> 1999  
<212> DNA  
<213> Homo sapiens

<400> 2925  
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120  
gctgccgaca gcactgagga gttggccgaa gtcgaagaag gagttggagt agtgggcgaa  
180  
gataatgacg cagccgcgag aggagcggag gcctttggcg acagtgagga ggacggagag  
240  
gatgtgttcg aggtggagaa gatcctggac atgaagaccg aggggggtaa agttctttac  
300  
aaagtctcgt ggaaaggcta tacatcggat gatgatacct gggagcccga gattcacctg  
360  
gaggactgta aagaagtgtt tcttgaattt aggaagaaaa ttgcagagaa caaagccaaa  
420  
gcagtcagga aggatattca gagactatcc ttaaataacg acatatttga ggcgaactct  
480  
gatagcgatc agcaaagtga gacaaaagaa gatacttccc caaagaagaa aaagaaaaaa  
540  
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600  
aagctaaaag acaagtccaa accagacctg gagagctcct tggaaagttt agtttttgc  
660  
ttaaggacaa agaaaagaat ttctgaagcc aaagaagaac taaaggagtc caaaaagccc  
720  
aaaaaagatg aagtaaaaga aacaaaagaa ttaaagaaag ttaaaaaggg tgaaataaga  
780  
gatttaaaga cgaaaacaag agaagatccc aaagaaaata gaaaaacaaa aaaagaaaaa  
840  
tttgtcgaat cccaggtgga atctgaatca agtgactta atgattctcc ctttccagag  
900  
gatgacaatg aagggttaca ttccgacagc agagaagaga aacaaaacac taagagtgc  
960  
agagagagag cagggcagga catggggctg gagcatggct ttgagaagcc cctagacagt  
1020  
gccatgagtg ctgaggagga taccgatgtc agaggcagga ggaaaaagaa gaccccgaga  
1080  
aaggctgagg acactagaga gaacaggaag ctagagaaca agaacgcttt cttagagaag  
1140  
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1200  
aagctgatgc ctgtatctgc ccaaagccga aagggccgga ggttgagcgg ggaagagaga  
1260  
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1320  
gaaaaatata agaaaaggca tgattctgac aaggaagaaa aaggcagaaa agagccaaaa  
1380  
ggattaaaga cacttaagga aatcagaaat gcatttgatt tatttaatt aactccagaa  
1440  
gaaaaaatg atgtttctga gaataatcgg aaaagggaag aaataccact ggattttaaa  
1500  
accatagacg atcacaaaac caaggaaaac aaacagtcac ttaaagaaag gagaaacacc  
1560

agagacgaaa cggatacttg ggcatacatt gctgcagaag gtgatacagga ggtttttagac  
1620  
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1680  
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1740  
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1800  
gacgggtcat tctgtgactt ctcaatggat caaacaattt ttctgagttc ctataatgtt  
1860  
ctcagcacgt atagaaatta aaagatttct gattttctac cttacctact cttacctggc  
1920  
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<210> 2926

<211> 305

<212> PRT

<213> Homo sapiens

<400> 2926

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Glu	Asp	Pro	Lys	Glu	Asn	Arg	Lys	Thr	Lys	Lys	Glu	Lys	Phe	Val	Glu
			20				25						30		
Ser	Gln	Val	Glu	Ser	Glu	Ser	Ser	Val	Leu	Asn	Asp	Ser	Pro	Phe	Pro
		35				40					45				
Glu	Asp	Asp	Asn	Glu	Gly	Leu	His	Ser	Asp	Ser	Arg	Glu	Glu	Lys	Gln
	50				55					60					
Asn	Thr	Lys	Ser	Ala	Arg	Glu	Arg	Ala	Gly	Gln	Asp	Met	Gly	Leu	Glu
65				70					75					80	
His	Gly	Phe	Glu	Lys	Pro	Leu	Asp	Ser	Ala	Met	Ser	Ala	Glu	Glu	Asp
			85					90					95		
Thr	Asp	Val	Arg	Gly	Arg	Arg	Lys	Lys	Lys	Thr	Pro	Arg	Lys	Ala	Glu
		100					105						110		
Asp	Thr	Arg	Glu	Asn	Arg	Lys	Leu	Glu	Asn	Lys	Asn	Ala	Phe	Leu	Glu
	115					120						125			
Lys	Lys	Thr	Val	Pro	Lys	Lys	Gln	Arg	Asn	Gln	Asp	Arg	Ser	Lys	Ser
	130					135					140				
Ala	Ala	Glu	Leu	Glu	Lys	Leu	Met	Pro	Val	Ser	Ala	Gln	Thr	Pro	Lys
145					150				155					160	
Gly	Arg	Arg	Leu	Ser	Gly	Glu	Glu	Arg	Gly	Leu	Trp	Ser	Thr	Asp	Ser
			165					170					175		
Ala	Glu	Glu	Asp	Lys	Glu	Thr	Lys	Arg	Asn	Glu	Ser	Lys	Glu	Lys	Tyr
	180						185						190		
Gln	Lys	Arg	His	Asp	Ser	Asp	Lys	Glu	Glu	Lys	Gly	Arg	Lys	Glu	Pro
	195					200						205			
Lys	Gly	Leu	Lys	Thr	Leu	Lys	Glu	Ile	Arg	Asn	Ala	Phe	Asp	Leu	Phe
	210				215						220				
Lys	Leu	Thr	Pro	Glu	Glu	Lys	Asn	Asp	Val	Ser	Glu	Asn	Asn	Arg	Lys
225					230					235				240	
Arg	Glu	Glu	Ile	Pro	Leu	Asp	Phe	Lys	Thr	Ile	Asp	Asp	His	Lys	Thr

245 250 255  
Lys Glu Asn Lys Gln Ser Leu Lys Glu Arg Arg Asn Thr Arg Asp Glu  
260 265 270  
Thr Asp Thr Trp Ala Tyr Ile Ala Ala Glu Gly Asp Gln Glu Val Leu  
275 280 285  
Asp Ser Val Cys Gln Ala Asp Glu Asn Ser Gly Glu Phe Gly Ile Ile  
290 295 300  
Leu  
305

&lt;210&gt; 2927

&lt;211&gt; 1084

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2927

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60  
aggcggccct gggatgtgag gggcctgagg gatctgtccc tgaggcctgc cactttttct  
120  
ggtgttaact gtctggccta tgatgaagcc atcatggctc agcaggaccg aattcagcaa  
180  
gagattgctg tgcagaacct tctggtgtca gagcggctgg agctctcggc cctatacaag  
240  
gagtatgctg aagatgacaa catctatcaa cagaagatca aggacctcca caaaaagtac  
300  
tcgtacatcc gcaagaccag gcctgacggc aactgtttct atcgggcttt cggattctcc  
360  
cacttgaggg cactgctgga tgacagcaag gagttgcagc ggttcaaggc tgtgtctgcc  
420  
aagagcaagg aagacctggt gtcccagggc ttactgaat tcacaattga ggatttccac  
480  
aacacgttca tggacctgat tgagcagggtg gagaagcaga cctctgtcgc cgacctgctg  
540  
gcctccttca atgaccagag cacctccgac taccttgtgg tctacctgcg gctgctcacc  
600  
tcgggctacc tgcagcgcga gagcaagttc ttcgagcact tcatcgaggg tggacggact  
660  
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720  
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780  
gaggggcgca ccaccaatcc gcacatcttc cctgagggct ccgagcccaa ggtctacctt  
840  
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900  
gccctgctgc cccctctgc caggcgctag acatgtacag aggtttttct gtggtgttaa  
960  
atggtcctat ttcaccccct tcttctgtc acatgacccc ccccatggt ttattaaagg  
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aaaa  
1084

<210> 2928  
<211> 292  
<212> PRT  
<213> Homo sapiens

<400> 2928  
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Ser Gly Cys Arg Arg Arg Pro Trp Asp Val Arg Gly Leu Arg Asp Leu  
20 25 30  
Ser Leu Arg Pro Ala Thr Phe Ser Gly Val Asn Cys Leu Ala Tyr Asp  
35 40 45  
Glu Ala Ile Met Ala Gln Gln Asp Arg Ile Gln Gln Glu Ile Ala Val  
50 55 60  
Gln Asn Pro Leu Val Ser Glu Arg Leu Glu Leu Ser Val Leu Tyr Lys  
65 70 75 80  
Glu Tyr Ala Glu Asp Asp Asn Ile Tyr Gln Lys Ile Lys Asp Leu  
85 90 95  
His Lys Lys Tyr Ser Tyr Ile Arg Lys Thr Arg Pro Asp Gly Asn Cys  
100 105 110  
Phe Tyr Arg Ala Phe Gly Phe Ser His Leu Glu Ala Leu Leu Asp Asp  
115 120 125  
Ser Lys Glu Leu Gln Arg Phe Lys Ala Val Ser Ala Lys Ser Lys Glu  
130 135 140  
Asp Leu Val Ser Gln Gly Phe Thr Glu Phe Thr Ile Glu Asp Phe His  
145 150 155 160  
Asn Thr Phe Met Asp Leu Ile Glu Gln Val Glu Lys Gln Thr Ser Val  
165 170 175  
Ala Asp Leu Leu Ala Ser Phe Asn Asp Gln Ser Thr Ser Asp Tyr Leu  
180 185 190  
Val Val Tyr Leu Arg Leu Leu Thr Ser Gly Tyr Leu Gln Arg Glu Ser  
195 200 205  
Lys Phe Phe Glu His Phe Ile Glu Gly Gly Arg Thr Val Lys Glu Phe  
210 215 220  
Cys Gln Gln Glu Val Glu Pro Met Cys Lys Glu Ser Asp His Ile His  
225 230 235 240  
Ile Ile Ala Leu Ala Gln Ala Leu Ser Val Ser Ile Gln Val Glu Tyr  
245 250 255  
Met Asp Arg Gly Glu Gly Gly Thr Thr Asn Pro His Ile Phe Pro Glu  
260 265 270  
Gly Ser Glu Pro Lys Val Tyr Leu Leu Tyr Arg Pro Gly His Tyr Asp  
275 280 285  
Ile Leu Tyr Lys  
290

<210> 2929  
<211> 4920  
<212> DNA  
<213> Homo sapiens

<400> 2929  
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60

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120  
ggaaggcgcg cgtcccgccc tgacccgcgc gcctctccca cccagcagt gacgcgcgcg  
180  
ctgggagctg gagcccgcg agcgccccgc agggcgatgg acggccgaac cccgcgcccc  
240  
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300  
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360  
cagaaagaaa acatgataga taaagacgtt gaactctcag tggctcctacc tggggatatt  
420  
atcaaactca ctactgttca tggcagtaaa cctatgatgg acttggtgat attcctttgt  
480  
gcacagtatc acttaaactc atcaagttac acaatcgatc tgttgtcagc tgaacagaac  
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900  
ctagatatta tgaaggagaa agaaaataaa gggTTTTTca gTTTTTTTca acgcagtaag  
960  
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1020  
actTTTaca ggtccaatac catTTTcaaa ccatatattt ccaacacct gccgtcggt  
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1320  
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1380  
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1440  
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1620  
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1680

gatataataa atacactgaa aaatgatcct gactcagccc ttggcaatgg tagtggagag  
1740  
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1800  
cacagtgtag tatatgatac aagcaatgga aagaaggtag ttgacagtat aagaaacttg  
1860  
aagtcgttgg gcccaaacca agagaatggt caaaatgaaa taattgtcta tccagagaac  
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acagaagaca atatgaaaaa tggagtgaag aaaacagaaa tcaatgtaga aggtgttgcc  
1980  
aaaaataaca acattgatat ggaagttag agaccatcaa actctgaggg acatgaaact  
2040  
gatactgcta taagttacaa ggaaaacat ctagcagctt catcagtacc agatcaaaaa  
2100  
ctgaatcaac ccagtgcaga aaagacaaaa gatgcagcaa ttcagacaac cccttcttgt  
2160  
aacagttttg atgggaaaca ccaagatcat aatttatctg actccaaagt tgaagaatgt  
2220  
gtgcaaactt caaataacaa catatcaact caacactcat gcttaagttc acaagattct  
2280  
gtaaatacct caaggaatt caggagtcaa ggcacctaa ttatacttc agaagatccg  
2340  
cttaccgtaa aagatccaat ttgtgcacat ggtaatgatg atcttttgcc tcctgtagat  
2400  
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2460  
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2520  
atgactactt ataaaaatagt gcctcccaaa tccttggaag tatcgaaaga ctggcaatca  
2580  
gaaaccatag agtataaaga tgatcaggac atgcatgctt tagggaaaaa gcacactcat  
2640  
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2700  
gagccactgc caaaccttaa accgaagcct aacctgagaa cagagcatca agtgcccagt  
2760  
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2820  
agagacactg gcacagctcc ttttgcacca aatttggaag aaataaaca tattttggaa  
2880  
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2940  
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3000  
gcccctaatac ctgctccaaa agaactgaca aataaagagg cagaaagga tatgctgcct  
3060  
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3120  
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3240  
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3300

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3360  
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3420  
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3540  
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3600  
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3720  
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3780  
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3840  
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3900  
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3960  
taaattgattt tcatttttta caaatgaaaa ataattcctt tgtattgatt tcacttacca  
4020  
gcacattctc tacaatggtg acttagacaa aagtataaga ttcatagact ttatatttgt  
4080  
atgacataca actaggacaa acatagatat gacatttgct gcctcagtg agcaattgga  
4140  
aatatttata agttatatga aagcctgttt tgggctgaaa gaattattta gaaaactagt  
4200  
gataccaaat aagtatattc agttcaataa ttattttcaa tgatgaatca cttagtgtga  
4260  
aagacttgcc ttgtgtattc tttatgtaat taaaaatcac tgtcaatttt atgggaagct  
4320  
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4380  
attctacaat aattttaaat attttctgta tataattatg acattgtcac acagaaatta  
4440  
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<210> 2930  
<211> 1166  
<212> PRT  
<213> Homo sapiens

<400> 2930  
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35 40 45  
Gln Lys Glu Asn Met Ile Asp Lys Asp Val Glu Leu Ser Val Val Leu  
50 55 60  
Pro Gly Asp Ile Ile Lys Ser Thr Thr Val His Gly Ser Lys Pro Met  
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Met Asp Leu Leu Ile Phe Leu Cys Ala Gln Tyr His Leu Asn Pro Ser  
85 90 95  
Ser Tyr Thr Ile Asp Leu Leu Ser Ala Glu Gln Asn His Ile Lys Phe  
100 105 110  
Lys Pro Asn Thr Pro Ile Gly Met Leu Glu Val Glu Lys Val Ile Leu  
115 120 125  
Lys Pro Lys Met Leu Asp Lys Lys Lys Pro Thr Pro Ile Ile Pro Glu  
130 135 140  
Lys Thr Val Arg Val Val Ile Asn Phe Lys Lys Thr Gln Lys Thr Ile  
145 150 155 160  
Val Arg Val Ser Pro His Ala Ser Leu Gln Glu Leu Ala Pro Ile Ile  
165 170 175  
Cys Ser Lys Cys Glu Phe Asp Pro Leu His Thr Leu Leu Leu Lys Asp  
180 185 190  
Tyr Gln Ser Gln Glu Pro Leu Asp Leu Thr Lys Ser Leu Asn Asp Leu  
195 200 205  
Gly Leu Arg Glu Leu Tyr Ala Met Asp Val Asn Arg Glu Ser Cys Gln  
210 215 220  
Ile Ser Gln Asn Leu Asp Ile Met Lys Glu Lys Glu Asn Lys Gly Phe  
225 230 235 240  
Phe Ser Phe Phe Gln Arg Ser Lys Lys Lys Arg Asp Gln Thr Ala Ser  
245 250 255  
Ala Pro Ala Thr Pro Leu Val Asn Lys His Arg Pro Thr Phe Thr Arg  
260 265 270  
Ser Asn Thr Ile Ser Lys Pro Tyr Ile Ser Asn Thr Leu Pro Ser Asp  
275 280 285  
Ala Pro Lys Lys Arg Arg Ala Pro Leu Pro Pro Met Pro Ala Ser Gln  
290 295 300  
Ser Val Pro Gln Asp Leu Ala His Ile Gln Glu Arg Pro Ala Ser Cys  
305 310 315 320  
Ile Val Lys Ser Met Ser Val Asp Glu Thr Asp Lys Ser Pro Cys Glu  
325 330 335  
Ala Gly Arg Val Arg Ala Gly Ser Leu Gln Leu Ser Ser Met Ser Ala  
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Gly Asn Ser Ser Leu Arg Arg Thr Lys Arg Lys Ala Pro Ser Pro Pro  
355 360 365  
Ser Lys Ile Pro Pro His Gln Ser Asp Glu Asn Ser Arg Val Thr Ala

370	375	380			
Leu Gln Pro Val Asp Gly Val Pro Pro Asp Ser Ala Ser Glu Ala Asn					
385	390	395	400		
Ser Pro Glu Glu Leu Ser Ser Pro Glu Thr Phe His Pro Gly Leu Ser					
	405	410	415		
Ser Gln Glu Gln Cys Thr Ala Pro Lys Leu Met Glu Glu Thr Ser Val					
	420	425	430		
Phe Glu Cys Pro Gly Thr Pro Glu Ala Ala Ile Thr Ser Leu Thr Ser					
	435	440	445		
Gly Ile Ser Ser Asp Tyr Ser Leu Glu Glu Ile Asp Glu Lys Glu Glu					
	450	455	460		
Leu Ser Glu Val Pro Lys Val Glu Ala Glu Asn Ile Ser Pro Lys Ser					
465	470	475	480		
Gln Asp Ile Pro Phe Val Ser Thr Asp Ile Ile Asn Thr Leu Lys Asn					
	485	490	495		
Asp Pro Asp Ser Ala Leu Gly Asn Gly Ser Gly Glu Phe Ser Gln Asn					
	500	505	510		
Ser Met Glu Glu Lys Gln Glu Thr Lys Ser Thr Asp Gly Gln Glu Pro					
	515	520	525		
His Ser Val Val Tyr Asp Thr Ser Asn Gly Lys Lys Val Val Asp Ser					
	530	535	540		
Ile Arg Asn Leu Lys Ser Leu Gly Pro Asn Gln Glu Asn Val Gln Asn					
545	550	555	560		
Glu Ile Ile Val Tyr Pro Glu Asn Thr Glu Asp Asn Met Lys Asn Gly					
	565	570	575		
Val Lys Lys Thr Glu Ile Asn Val Glu Gly Val Ala Lys Asn Asn Asn					
	580	585	590		
Ile Asp Met Glu Val Glu Arg Pro Ser Asn Ser Glu Ala His Glu Thr					
	595	600	605		
Asp Thr Ala Ile Ser Tyr Lys Glu Asn His Leu Ala Ala Ser Ser Val					
	610	615	620		
Pro Asp Gln Lys Leu Asn Gln Pro Ser Ala Glu Lys Thr Lys Asp Ala					
625	630	635	640		
Ala Ile Gln Thr Thr Pro Ser Cys Asn Ser Phe Asp Gly Lys His Gln					
	645	650	655		
Asp His Asn Leu Ser Asp Ser Lys Val Glu Glu Cys Val Gln Thr Ser					
	660	665	670		
Asn Asn Asn Ile Ser Thr Gln His Ser Cys Leu Ser Ser Gln Asp Ser					
	675	680	685		
Val Asn Thr Ser Arg Glu Phe Arg Ser Gln Gly Thr Leu Ile Ile His					
	690	695	700		
Ser Glu Asp Pro Leu Thr Val Lys Asp Pro Ile Cys Ala His Gly Asn					
705	710	715	720		
Asp Asp Leu Leu Pro Pro Val Asp Arg Ile Asp Lys Asn Ser Thr Ala					
	725	730	735		
Ser Tyr Leu Lys Asn Tyr Pro Leu Tyr Arg Gln Asp Tyr Asn Pro Lys					
	740	745	750		
Pro Lys Pro Ser Asn Glu Ile Thr Arg Glu Tyr Ile Pro Lys Ile Gly					
	755	760	765		
Met Thr Thr Tyr Lys Ile Val Pro Pro Lys Ser Leu Glu Ile Ser Lys					
	770	775	780		
Asp Trp Gln Ser Glu Thr Ile Glu Tyr Lys Asp Asp Gln Asp Met His					
785	790	795	800		
Ala Leu Gly Lys Lys His Thr His Glu Asn Val Lys Glu Thr Ala Ile					

805 810 815  
Gln Thr Glu Asp Ser Ala Ile Ser Glu Ser Pro Glu Glu Pro Leu Pro  
820 825 830  
Asn Leu Lys Pro Lys Pro Asn Leu Arg Thr Glu His Gln Val Pro Ser  
835 840 845  
Ser Val Ser Ser Pro Asp Asp Ala Met Val Ser Pro Leu Lys Pro Ala  
850 855 860  
Pro Lys Met Thr Arg Asp Thr Gly Thr Ala Pro Phe Ala Pro Asn Leu  
865 870 875 880  
Glu Glu Ile Asn Asn Ile Leu Glu Ser Lys Phe Lys Ser Arg Ala Ser  
885 890 895  
Asn Ala Gln Ala Lys Pro Ser Ser Phe Phe Leu Gln Met Gln Lys Arg  
900 905 910  
Val Ser Gly His Tyr Val Thr Ser Ala Ala Ala Lys Ser Val His Ala  
915 920 925  
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930 935 940  
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945 950 955 960  
Pro His Ser Val Pro Gln Pro Leu Val Glu Lys Thr Asp Asp Asp Val  
965 970 975  
Ile Gly Gln Ala Pro Ala Glu Ala Ser Pro Pro Pro Ile Ala Pro Lys  
980 985 990  
Pro Val Thr Ile Pro Ala Ser Gln Val Ser Thr Gln Asn Leu Lys Thr  
995 1000 1005  
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Pro Phe Ala Leu Ala Val Val Lys Arg Ser Gln Ser Phe Ser Lys Glu  
1025 1030 1035 1040  
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1045 1050 1055  
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Gln Leu Gly Val Ser Asp Lys Glu Asn Asn Ser Ala His Asn Glu Gln  
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1090 1095 1100  
Arg Gln Ser Ser Leu Thr Phe Gln Ser Ser Asp Pro Glu Gln Met Arg  
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Gln Ser Leu Leu Thr Ala Ile Arg Ser Gly Glu Ala Ala Ala Lys Leu  
1125 1130 1135  
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1155 1160 1165

&lt;210&gt; 2931

&lt;211&gt; 625

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2931

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 ttagagatct tcgaagccat attttctcca gatgttttgg gatgaggaga cacaacaaca  
 180  
 gtgttttttag gttcactctg atgagttgcc atgaaatcaa accaatctaa actgtcatct  
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 ctgttatttt tgtgctgagc tgaatgtttc ctacttggtg atctattagg ctccagatgc  
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 420  
 ttccatggag ggcagacaat gtggaaagta acaagaaaaa aaggctagca ctagattctg  
 480  
 aagcagcagt ctctgctgat aaaccagact cagtactgac tcatcatgtc cccaggaacc  
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<210> 2932  
 <211> 90  
 <212> PRT  
 <213> Homo sapiens

<400> 2932  
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 35 40 45  
 Asp Lys Pro Asp Ser Val Leu Thr His His Val Pro Arg Asn Leu Gln  
 50 55 60  
 Lys Leu Cys Lys Glu Arg Ala Gln Lys Leu Cys Arg Asn Ser Thr Arg  
 65 70 75 80  
 Val Pro Ala Gln Cys Thr Val Pro Ser Arg  
 85 90

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 <211> 688  
 <212> DNA  
 <213> Homo sapiens

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 180  
 gaaagaaata atgctacact gcaagcagag aagcaagcgt tgaaaactca actgaagcaa  
 240

cttgagacac agaacaataa tttgcaggct cagattcttg cacttcagag gcagacagtg  
 300  
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 360  
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 420  
 cagtcttcct tagaaaatga aaatgaatct gtaatcaaag agcgagaaga cctaaaatct  
 480  
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 540  
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 660  
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 688

<210> 2934

<211> 229

<212> PRT

<213> Homo sapiens

<400> 2934

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			20					25					30		
Ser	Gly	Glu	Asp	Asn	Lys	Trp	Glu	Arg	Glu	Ser	Gln	Glu	Thr	Thr	Arg
		35					40					45			
Glu	Leu	Leu	Lys	Val	Lys	Asp	Arg	Leu	Ile	Glu	Val	Glu	Arg	Asn	Asn
		50				55					60				
Ala	Thr	Leu	Gln	Ala	Glu	Lys	Gln	Ala	Leu	Lys	Thr	Gln	Leu	Lys	Gln
65					70				75					80	
Leu	Glu	Thr	Gln	Asn	Asn	Leu	Gln	Ala	Gln	Ile	Leu	Ala	Leu	Gln	
			85					90					95		
Arg	Gln	Thr	Val	Ser	Leu	Gln	Glu	Gln	Asn	Thr	Thr	Leu	Gln	Thr	Gln
			100					105					110		
Asn	Ala	Lys	Leu	Gln	Val	Glu	Asn	Ser	Thr	Leu	Asn	Ser	Gln	Ser	Thr
		115					120					125			
Ser	Leu	Met	Asn	Gln	Asn	Ala	Gln	Leu	Leu	Ile	Gln	Gln	Ser	Ser	Leu
		130				135					140				
Glu	Asn	Glu	Asn	Glu	Ser	Val	Ile	Lys	Glu	Arg	Glu	Asp	Leu	Lys	Ser
145					150					155				160	
Leu	Tyr	Asp	Ser	Leu	Ile	Lys	Asp	His	Glu	Lys	Leu	Glu	Leu	Leu	His
			165					170					175		
Glu	Arg	Gln	Ala	Ser	Glu	Tyr	Glu	Ser	Leu	Ile	Ser	Lys	His	Gly	Thr
			180					185					190		
Leu	Lys	Ser	Ala	His	Lys	Asn	Leu	Glu	Val	Glu	His	Arg	Asp	Leu	Glu
		195					200					205			
Asp	Arg	Tyr	Asn	Gln	Leu	Leu	Lys	Gln	Lys	Gly	Gln	Leu	Glu	Asp	Leu
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Glu	Lys	Met	Leu	Lys											
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<211> 1200  
<212> DNA  
<213> Homo sapiens

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240  
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360  
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420  
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720  
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960  
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1020  
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1080  
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<210> 2936  
<211> 109  
<212> PRT  
<213> Homo sapiens

<400> 2936  
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35 40 45  
Ser Lys Ser Ser Ser Arg Gln Leu Ser Glu Ser Phe Lys Ser Lys Glu  
50 55 60  
Phe Val Ser Ser Asp Glu Ser Ser Ser Gly Glu Asn Lys Ser Lys Lys  
65 70 75 80  
Lys Arg Arg Arg Ser Glu Asp Ser Glu Glu Glu Glu Leu Ala Ser Thr  
85 90 95  
Pro Pro Ser Ser Glu Asp Ser Ala Ser Gly Ser Asp Glu  
100 105

&lt;210&gt; 2937

&lt;211&gt; 749

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2937

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cgagtcaaaa agctgacatg tcgggtaaaa attaaagaag caacggggct gcccttaaac  
120  
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180  
gccccgggtgg tggaccccgga ggtgccttca ccacagtcca aggatgccca gtacacagtg  
240  
accttctccc actgtaagga ctatgtggtg aatgtaacag aagaatttct ggagttcatt  
300  
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420  
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749

&lt;210&gt; 2938

&lt;211&gt; 249

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2938

Xaa Asn Ser Ser Glu Ser Gly Ser Leu Glu Val Val Asp Ser Ser Gly

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Glu Ile Ile His Arg Val Lys Lys Leu Thr Cys Arg Val Lys Ile Lys
      20           25           30
Glu Ala Thr Gly Leu Pro Leu Asn Leu Ser Asn Phe Val Phe Cys Gln
      35           40           45
Tyr Thr Phe Trp Asp Gln Cys Glu Ser Thr Val Ala Ala Pro Val Val
      50           55           60
Asp Pro Glu Val Pro Ser Pro Gln Ser Lys Asp Ala Gln Tyr Thr Val
      65           70           75           80
Thr Phe Ser His Cys Lys Asp Tyr Val Val Asn Val Thr Glu Glu Phe
      85           90           95
Leu Glu Phe Ile Ser Asp Gly Ala Leu Ala Ile Glu Val Trp Gly His
      100          105          110
Arg Cys Ala Gly Asn Gly Ser Ser Ile Trp Glu Val Asp Ser Leu His
      115          120          125
Ala Lys Thr Arg Thr Leu His Asp Arg Trp Asn Glu Val Thr Arg Arg
      130          135          140
Ile Glu Met Trp Ile Ser Ile Leu Glu Leu Asn Glu Leu Gly Glu Tyr
      145          150          155          160
Ala Ala Val Glu Leu His Gln Ala Lys Asp Val Asn Thr Gly Gly Ile
      165          170          175
Phe Gln Leu Arg Gln Gly His Ser Arg Arg Val Gln Val Thr Val Lys
      180          185          190
Pro Val Gln His Ser Gly Thr Leu Pro Leu Met Val Glu Ala Ile Leu
      195          200          205
Ser Val Ser Ile Gly Cys Val Thr Ala Arg Ser Thr Lys Leu Gln Arg
      210          215          220
Gly Leu Asp Ser Tyr Gln Arg Asp Asp Glu Asp Gly Asp Asp Met Asp
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Ser Tyr Gln Glu Glu Asp Leu Asn Cys
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&lt;210&gt; 2939

&lt;211&gt; 2405

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2939

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480

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<211> 357

<212> PRT

<213> Homo sapiens

<400> 2940

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Met	Ile	Pro	Cys	Val	Leu	Gln	Tyr	Leu	Asn	Phe	Ser	Thr	Ile	Ile	Gly
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Val	Gly	Val	Gly	Ala	Gly	Ala	Tyr	Ile	Leu	Ala	Arg	Tyr	Ala	Leu	Asn
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His	Pro	Asp	Thr	Val	Glu	Gly	Leu	Val	Leu	Ile	Asn	Ile	Asp	Pro	Asn
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Ser	Ser	Ile	Pro	Glu	Met	Ile	Leu	Gly	His	Leu	Phe	Ser	Gln	Glu	Glu
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Leu	Ser	Gly	Asn	Ser	Glu	Leu	Ile	Gln	Lys	Tyr	Arg	Asn	Ile	Ile	Thr
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His	Ala	Pro	Asn	Leu	Asp	Asn	Ile	Glu	Leu	Tyr	Trp	Asn	Ser	Tyr	Asn
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Val	Val	Glu	Cys	Asn	Ser	Lys	Leu	Asp	Pro	Thr	Gln	Thr	Ser	Phe	Leu
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Lys	Met	Ala	Asp	Ser	Gly	Gly	Gln	Pro	Gln	Leu	Thr	Gln	Pro	Gly	Lys

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<210> 2942  
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<212> PRT  
<213> Homo sapiens

&lt;400&gt; 2942

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 Gly Arg Gly His Asp His Leu Ala Gly Ala Ser Pro Thr Ala Arg Gln  
 35 40 45  
 His Leu Phe Lys Gln Gly Gln Leu Ser Ala Gln Gly Gly Ala Gln Pro  
 50 55 60  
 Ser Val Glu Ala Pro Ala Ala Pro Arg Pro Thr Ala Thr Gln Leu Thr  
 65 70 75 80  
 Arg Asp Leu Leu Arg Ser Arg Gly Ile Ala Gly Leu Tyr Lys Gly Leu  
 85 90 95  
 Gly Ala Thr Leu Leu Arg Asp Val Pro Phe Ser Val Val Tyr Phe Pro  
 100 105 110  
 Leu Phe Ala Asn Leu Asn Gln Leu Gly Arg Pro Ala Ser Glu Glu Lys  
 115 120 125  
 Ser Pro Phe Tyr Val Ser Phe Leu Ala Gly Cys Val Ala Gly Ser Ala  
 130 135 140  
 Ala Ala Val Ala Val Asn Pro Cys Asp Val Val Lys Thr Arg Leu Gln  
 145 150 155 160  
 Ser Leu Gln Arg Gly Val Asn Glu Asp Thr Tyr Ser Gly Ile Leu Asp  
 165 170 175  
 Cys Ala Arg Lys Ile Leu Arg His Glu Gly Pro Ser Ala Phe Leu Lys  
 180 185 190  
 Gly Ala Tyr Cys Arg Ala Leu Val Ile Ala Pro Leu Phe Gly Ile Ala  
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 Gln Asp Pro Gln Ala  
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&lt;210&gt; 2943

&lt;211&gt; 1501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2943

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&lt;210&gt; 2944

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2944

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			20					25					30		
Lys	Lys	Ile	Ser	Arg	Leu	Asp	Ala	Glu	Leu	Val	Lys	Tyr	Lys	Asp	Gln
		35				40						45			
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	50				55					60					
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				85						90					95				
Ser	Leu	Lys	Asp	Thr	Lys	Thr	Thr	Val	Asp	Ala	Met	Lys	Leu	Gly	Val				
			100						105					110					
Lys	Glu	Met	Lys	Lys	Ala	Tyr	Lys	Gln	Val	Lys	Ile	Asp	Gln	Ile	Glu				
		115						120					125						
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&lt;210&gt; 2945

&lt;211&gt; 3331

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2945

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&lt;210&gt; 2946

&lt;211&gt; 463

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2946

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Pro	Ala	Val	Gly	Pro	Thr	Val	Ser	Asn	Met	Ser	Gly	Leu	Asp	Gly	Val
			20					25				30			
Lys	Arg	Thr	Thr	Pro	Leu	Gln	Thr	His	Ser	Ile	Ile	Ile	Ser	Asp	Gln
			35				40					45			
Val	Pro	Ser	Asp	Gln	Asp	Ala	His	Gln	Tyr	Leu	Arg	Leu	Arg	Asp	Gln
			50			55				60					
Ser	Glu	Ala	Thr	Gln	Val	Met	Ala	Glu	Pro	Gly	Glu	Gly	Gly	Ser	Glu
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Thr	Val	Ala	Leu	Pro	Pro	Pro	Pro	Pro	Ser	Glu	Glu	Gly	Gly	Val	Pro
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Gln	Asp	Ala	Ala	Gly	Arg	Gly	Gly	Thr	Pro	Gln	Ile	Arg	Val	Val	Gly
		100					105					110			
Gly	Arg	Gly	His	Val	Ala	Ile	Lys	Ala	Gly	Gln	Glu	Glu	Gly	Gln	Pro
		115				120						125			
Pro	Ala	Glu	Gly	Leu	Ala	Ala	Ala	Ser	Val	Val	Met	Ala	Ala	Asp	Arg
		130				135					140				
Ser	Leu	Lys	Lys	Gly	Val	Gln	Gly	Gly	Glu	Lys	Ala	Leu	Glu	Ile	Cys



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                                  180                      185                      190  
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                                  195                      200                      205  
 Lys Glu Val Met Glu Glu Gln Met Glu Val Glu Glu Gln Pro Pro Glu  
                                  210                      215                      220  
 Gly Glu Glu Ile Glu Val Ala Glu Glu Asp Arg Leu Glu Glu Glu Ala  
 225                                   230                      235                      240  
 Arg Glu Glu Glu Gly Pro Trp Pro Leu His Glu Ala Leu Arg Met Asp  
                                  245                      250                      255  
 Pro Leu Glu Ala Ile Gln Leu Glu Leu Asp Thr Val Asn Ala Gln Ala  
                                  260                      265                      270  
 Asp Arg Ala Phe Gln Gln Leu Glu His Lys Phe Gly Arg Met Arg Arg  
                                  275                      280                      285  
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                                  355                      360                      365  
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                                  420                      425                      430  
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&lt;210&gt; 2947

&lt;211&gt; 997

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2947

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&lt;210&gt; 2948

&lt;211&gt; 332

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2948

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 Val Trp Asp Ala Ala Lys Gln Gln Pro Leu Thr Glu Leu Ala Ala His

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Lys Pro Arg Ala Ser Gln Ser Thr Gln Ala His Glu Asn Ser Arg Asp
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Ser Arg Leu Ala Trp Met Gly Thr Trp Glu His Leu Val Ser Thr Gly
225      230      235      240
Phe Asn Gln Met Arg Glu Arg Glu Val Lys Leu Trp Asp Thr Arg Phe
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Phe Ser Ser Ala Leu Ala Ser Leu Thr Leu Asp Thr Ser Leu Gly Cys
      260      265      270
Leu Val Pro Leu Leu Asp Pro Asp Ser Gly Leu Leu Val Leu Ala Gly
      275      280      285
Lys Gly Glu Arg Gln Leu Tyr Cys Tyr Glu Val Val Pro Gln Gln Pro
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 <213> Homo sapiens

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<210> 2950

<211> 279

<212> PRT

<213> Homo sapiens

<400> 2950

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<211> 3478

<212> DNA

<213> Homo sapiens

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<212> PRT  
<213> Homo sapiens

<400> 2952  
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Glu Ser Gln Asp Lys Cys Thr Tyr Thr Phe Ile Val Pro Gln Gln Arg  
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Val Thr Gly Ala Ile Cys Val Asn Ser Lys Glu Pro Glu Val Leu Leu  
65 70 75 80  
Glu Asn Arg Val His Lys Gln Glu Leu Glu Leu Leu Asn Asn Glu Leu  
85 90 95  
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Asp Gly Gly Ile Val Ser Glu Val Lys Leu Leu Arg Lys Glu Ser Arg  
115 120 125  
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260 265 270  
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275 280 285  
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 Thr Thr Leu Asp Arg Asp His Asp Val Tyr Thr Gly Asn Cys Ala His  
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 Tyr Gln Lys Gly Gly Trp Trp Tyr Asn Ala Cys Ala His Ser Asn Leu  
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 Asn Gly Val Trp Tyr Arg Gly Gly His Tyr Arg Ser Arg Tyr Gln Asp  
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 Gly Val Tyr Trp Ala Glu Phe Arg Gly Gly Ser Tyr Ser Leu Lys Lys  
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 Val Val Met Met Ile Arg Pro Asn Pro Asn Thr Phe His  
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&lt;210&gt; 2953

&lt;211&gt; 1377

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2953

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<211> 181

<212> PRT

<213> Homo sapiens

<400> 2954

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<211> 295  
<212> DNA  
<213> Homo sapiens

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<211> 91  
<212> PRT  
<213> Homo sapiens

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Ile Asn Ser Tyr Phe Pro Ile Ser His Tyr Lys Gly His Thr Val Leu  
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<210> 2957  
<211> 4724  
<212> DNA  
<213> Homo sapiens

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&lt;210&gt; 2958

&lt;211&gt; 1047

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2958

Met	Ala	Val	Thr	Leu	Asp	Lys	Asp	Ala	Tyr	Tyr	Arg	Arg	Val	Lys	Arg
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Leu	Tyr	Ser	Asn	Trp	Arg	Lys	Gly	Glu	Asp	Glu	Tyr	Ala	Asn	Val	Asp
			20					25					30		
Ala	Ile	Val	Val	Ser	Val	Gly	Val	Asp	Glu	Glu	Ile	Val	Tyr	Ala	Lys
		35					40					45			
Ser	Thr	Ala	Leu	Gln	Thr	Trp	Leu	Phe	Gly	Tyr	Glu	Leu	Thr	Asp	Thr
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Ile	Met	Val	Phe	Cys	Asp	Asp	Lys	Ile	Ile	Phe	Met	Ala	Ser	Lys	Lys

65					70					75					80
Lys	Val	Glu	Phe	Leu	Lys	Gln	Ile	Ala	Asn	Thr	Lys	Gly	Asn	Glu	Asn
				85					90					95	
Ala	Asn	Gly	Ala	Pro	Ala	Ile	Thr	Leu	Leu	Ile	Arg	Glu	Lys	Asn	Glu
			100					105					110		
Ser	Asn	Lys	Ser	Ser	Phe	Asp	Lys	Met	Ile	Glu	Ala	Ile	Lys	Glu	Ser
		115					120					125			
Lys	Asn	Gly	Lys	Lys	Ile	Gly	Val	Phe	Ser	Lys	Asp	Lys	Phe	Pro	Gly
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Glu	Phe	Met	Lys	Ser	Trp	Asn	Asp	Cys	Leu	Asn	Lys	Glu	Gly	Phe	Asp
145					150					155					160
Lys	Ile	Asp	Ile	Ser	Ala	Val	Val	Ala	Tyr	Thr	Ile	Ala	Val	Lys	Glu
				165					170						175
Asp	Gly	Glu	Leu	Asn	Leu	Met	Lys	Lys	Ala	Ala	Ser	Ile	Thr	Ser	Glu
			180						185					190	
Val	Phe	Asn	Lys	Phe	Phe	Lys	Glu	Arg	Val	Met	Glu	Ile	Val	Asp	Ala
		195						200					205		
Asp	Glu	Lys	Val	Arg	His	Ser	Lys	Leu	Ala	Glu	Ser	Val	Glu	Lys	Ala
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Ile	Glu	Glu	Lys	Lys	Tyr	Leu	Ala	Gly	Ala	Asp	Pro	Ser	Thr	Val	Glu
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Met	Cys	Tyr	Pro	Pro	Ile	Ile	Gln	Ser	Gly	Gly	Asn	Tyr	Asn	Leu	Lys
			245						250					255	
Phe	Ser	Val	Val	Ser	Asp	Lys	Asn	His	Met	His	Phe	Gly	Ala	Ile	Thr
			260					265					270		
Cys	Ala	Met	Gly	Ile	Arg	Phe	Lys	Ser	Tyr	Cys	Ser	Asn	Leu	Val	Arg
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Thr	Leu	Met	Val	Asp	Pro	Ser	Gln	Glu	Val	Gln	Glu	Asn	Tyr	Asn	Phe
		290				295						300			
Leu	Leu	Gln	Leu	Gln	Glu	Glu	Leu	Leu	Lys	Glu	Leu	Arg	His	Gly	Val
305					310					315					320
Lys	Ile	Cys	Asp	Val	Tyr	Asn	Ala	Val	Met	Asp	Val	Val	Lys	Lys	Gln
			325						330					335	
Lys	Pro	Glu	Leu	Leu	Asn	Lys	Ile	Thr	Lys	Asn	Leu	Gly	Phe	Gly	Met
			340					345					350		
Gly	Ile	Glu	Phe	Arg	Glu	Gly	Ser	Leu	Val	Ile	Asn	Ser	Lys	Asn	Gln
		355					360					365			
Tyr	Lys	Leu	Lys	Lys	Gly	Met	Val	Phe	Ser	Ile	Asn	Leu	Gly	Phe	Ser
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Asp	Leu	Thr	Asn	Lys	Glu	Gly	Lys	Lys	Pro	Glu	Glu	Lys	Thr	Tyr	Ala
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Leu	Phe	Ile	Gly	Asp	Thr	Val	Leu	Val	Asp	Glu	Asp	Gly	Pro	Ala	Thr
			405						410					415	
Val	Leu	Thr	Ser	Val	Lys	Lys	Lys	Val	Lys	Asn	Val	Gly	Ile	Phe	Leu
			420					425					430		
Lys	Asn	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Glu	Lys	Asp	Glu	Ala	Glu	
		435					440					445			
Asp	Leu	Leu	Gly	Arg	Gly	Ser	Arg	Ala	Ala	Leu	Leu	Thr	Glu	Arg	Thr
		450				455						460			
Arg	Asn	Glu	Met	Thr	Ala	Glu	Glu	Lys	Arg	Arg	Ala	His	Gln	Lys	Glu
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Leu	Ala	Ala	Gln	Leu	Asn	Glu	Glu	Ala	Lys	Arg	Arg	Leu	Thr	Glu	Gln
			485						490					495	
Lys	Gly	Glu	Gln	Gln	Ile	Gln	Lys	Ala	Arg	Lys	Ser	Asn	Val	Ser	Tyr

2191

930 935 940  
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 945 950 955 960  
 Asp Ser Asp Glu Asp Tyr Ser Ser Glu Ala Glu Glu Ser Asp Tyr Ser  
 965 970 975  
 Lys Glu Ser Leu Gly Ser Glu Glu Glu Ser Gly Lys Asp Trp Asp Glu  
 980 985 990  
 Leu Glu Glu Glu Ala Arg Lys Ala Asp Arg Glu Ser Arg Tyr Glu Glu  
 995 1000 1005  
 Glu Glu Glu Gln Ser Arg Ser Met Ser Arg Lys Arg Lys Ala Ser Val  
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&lt;210&gt; 2959

&lt;211&gt; 3323

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2959

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 3323

&lt;210&gt; 2960

&lt;211&gt; 868

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2960

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 20 25 30  
 Gly Glu Glu Gln Ala Gln Tyr Cys Arg Ala Ala Glu Glu Leu Ser Lys  
 35 40 45  
 Leu Arg Arg Ala Ala Val Gly Arg Pro Leu Asp Lys His Glu Gly Ala  
 50 55 60  
 Leu Glu Thr Leu Leu Arg Tyr Tyr Asp Gln Ile Cys Ser Ile Glu Pro  
 65 70 75 80  
 Lys Phe Pro Phe Ser Glu Asn Gln Ile Cys Leu Thr Phe Thr Trp Lys  
 85 90 95  
 Asp Ala Phe Asp Lys Gly Ser Leu Phe Gly Gly Ser Val Lys Leu Ala  
 100 105 110  
 Leu Ala Ser Leu Gly Tyr Glu Lys Ser Cys Val Leu Phe Asn Cys Ala  
 115 120 125  
 Ala Leu Ala Ser Gln Ile Ala Ala Glu Gln Asn Leu Asp Asn Asp Glu  
 130 135 140  
 Gly Leu Lys Ile Ala Ala Lys His Tyr Gln Phe Ala Ser Gly Ala Phe  
 145 150 155 160  
 Leu His Ile Lys Glu Thr Val Leu Ser Ala Leu Ser Arg Glu Pro Thr

165 170 175  
Val Asp Ile Ser Pro Asp Thr Val Gly Thr Leu Ser Leu Ile Met Leu  
180 185 190  
Ala Gln Ala Gln Glu Val Phe Phe Leu Lys Ala Thr Arg Asp Lys Met  
195 200 205  
Lys Asp Ala Ile Ile Ala Lys Leu Ala Asn Gln Ala Ala Asp Tyr Phe  
210 215 220  
Gly Asp Ala Phe Lys Gln Cys Gln Tyr Lys Asp Thr Leu Pro Lys Glu  
225 230 235 240  
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260 265 270  
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275 280 285  
Ser Arg Tyr Asp Glu Tyr Val Asn Val Lys Asp Phe Ser Asp Lys Ile  
290 295 300  
Asn Arg Ala Leu Ala Ala Lys Lys Asp Asn Asp Phe Ile Tyr His  
305 310 315 320  
Asp Arg Val Pro Asp Leu Lys Asp Leu Asp Pro Ile Gly Lys Ala Thr  
325 330 335  
Leu Val Lys Ser Thr Pro Val Asn Val Pro Ile Ser Gln Lys Phe Thr  
340 345 350  
Asp Leu Phe Glu Lys Met Val Pro Val Ser Val Gln Gln Ser Leu Ala  
355 360 365  
Ala Tyr Asn Gln Arg Lys Ala Asp Leu Val Asn Arg Ser Ile Ala Gln  
370 375 380  
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405 410 415  
Ile Leu Thr Lys Ser Arg Ser Val Ile Glu Gln Gly Gly Ile Gln Thr  
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Val Asp Gln Leu Ile Lys Glu Leu Pro Glu Leu Leu Gln Arg Asn Arg  
435 440 445  
Glu Ile Leu Glu Glu Ser Leu Arg Leu Leu Asp Glu Glu Glu Ala Thr  
450 455 460  
Asp Asn Asp Leu Arg Ala Lys Phe Lys Asp Arg Trp Gln Arg Thr Pro  
465 470 475 480  
Ser Asn Asp Leu Tyr Lys Pro Leu Arg Ala Glu Gly Thr Asn Phe Arg  
485 490 495  
Thr Val Leu Asp Lys Ala Val Gln Ala Asp Gly Gln Val Lys Glu Cys  
500 505 510  
Tyr Gln Ser His Arg Asp Thr Ile Val Leu Leu Cys Lys Pro Glu Pro  
515 520 525  
Glu Leu Asn Ala Ala Ile Pro Ser Ala Asn Pro Ala Lys Thr Met Gln  
530 535 540  
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 Gly Thr Lys Phe Tyr Asn Glu Leu Thr Glu Ile Leu Val Arg Phe Gln  
 675 680 685  
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 Pro Thr Pro Pro Thr Pro Ala Pro Arg Thr Met Pro Pro Thr Lys Pro  
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<210> 2961  
 <211> 434  
 <212> DNA  
 <213> Homo sapiens

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<210> 2962  
<211> 92  
<212> PRT  
<213> Homo sapiens

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Pro Asp Glu Asp Leu Ser Xaa Arg Asn Lys Glu Pro Pro Ala Pro Ala  
35 40 45  
Gln Gln Leu Gln Pro Gln Pro Val Ala Val Gln Gly Pro Glu Pro Ala  
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<210> 2963  
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<212> DNA  
<213> Homo sapiens

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<210> 2964  
<211> 115  
<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2964

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 65 70 75 80  
 Pro Leu Pro Gln Ala Trp Pro Pro Asp Thr Pro Phe Pro Ala Asp Val  
 85 90 95  
 Asp Glu Cys Ser Asp Arg Arg Gly Gly Cys Pro Gln Arg Cys Val His  
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&lt;210&gt; 2965

&lt;211&gt; 3739

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2965

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&lt;210&gt; 2966

&lt;211&gt; 386

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2966

Met	Tyr	Gly	Glu	Cys	Arg	Thr	Tyr	Ile	Ile	His	Tyr	Tyr	Leu	Met	Asp
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<211> 1103
<212> DNA
<213> Homo sapiens

<400> 2967
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&lt;210&gt; 2968

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2968

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Gly	Pro	Ser	Lys	Ser	Pro	Ser	Gly	Val	Arg	Cys	Cys	Gly	Ala	Ala	Ala
			20					25					30		
Trp	Glu	Asp	Lys	Asp	Glu	Phe	Leu	Asp	Val	Ile	Tyr	Trp	Phe	Arg	Gln
		35					40					45			
Ile	Ile	Ala	Val	Val	Leu	Gly	Val	Ile	Trp	Gly	Val	Leu	Pro	Leu	Arg
	50					55				60					
Gly	Phe	Leu	Gly	Ile	Ala	Gly	Phe	Cys	Leu	Ile	Asn	Ala	Gly	Val	Leu

65		70		75		80									
Tyr	Leu	Tyr	Phe	Ser	Asn	Tyr	Leu	Gln	Ile	Asp	Glu	Glu	Glu	Tyr	Gly
				85					90					95	
Gly	Thr	Trp	Glu	Leu	Thr	Lys	Glu	Gly	Phe	Met	Thr	Ser	Phe	Ala	Xaa
			100					105					110		
Val	His	Gly	His	Leu	Asp	His	Leu	Leu	His	Cys	His	Pro	Leu		
		115					120					125			

&lt;210&gt; 2969

&lt;211&gt; 667

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2969

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667

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&lt;210&gt; 2970

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2970

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			20				25					30			
Ser	Gln	Thr	Ile	Met	Ile	Ala	Trp	Gly	Ser	Pro	Ser	Asn	Arg	Asp	Phe
		35				40					45				
Met	Glu	Thr	Leu	Asn	Thr	Leu	Lys	Tyr	Ala	Asn	Arg	Ala	Arg	Asn	Ile
	50				55			60							
Lys	Asn	Lys	Val	Val	Val	Asn	Gln	Asp	Lys	Thr	Ala	Ser	Lys	Ser	Met

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<212> DNA  
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4680  
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5160  
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&lt;210&gt; 2972

&lt;211&gt; 632

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2972

Met Asn Arg Tyr Thr Thr Ile Arg Gln Leu Gly Asp Gly Thr Tyr Gly  
1 5 10 15  
Ser Val Leu Leu Gly Arg Ser Ile Glu Ser Gly Glu Leu Ile Ala Ile  
20 25 30  
Lys Lys Met Lys Arg Lys Phe Tyr Ser Trp Glu Glu Cys Met Asn Leu  
35 40 45  
Arg Glu Val Lys Ser Leu Lys Lys Leu Asn His Ala Asn Val Val Lys  
50 55 60  
Leu Lys Glu Val Ile Arg Glu Asn Asp His Leu Tyr Phe Ile Phe Glu  
65 70 75 80  
Tyr Met Lys Glu Asn Leu Tyr Gln Leu Ile Lys Glu Arg Asn Lys Leu  
85 90 95  
Phe Pro Glu Ser Ala Ile Arg Asn Ile Met Tyr Gln Ile Leu Gln Gly  
100 105 110  
Leu Ala Phe Ile His Lys His Gly Phe Phe His Arg Asp Leu Lys Pro  
115 120 125  
Glu Asn Leu Leu Cys Met Gly Pro Glu Leu Val Lys Ile Ala Asp Phe  
130 135 140  
Gly Leu Ala Arg Glu Ile Arg Ser Lys Pro Pro Tyr Thr Asp Tyr Val  
145 150 155 160  
Ser Thr Arg Trp Tyr Arg Ala Pro Glu Val Leu Leu Arg Ser Thr Asn  
165 170 175  
Tyr Ser Ser Pro Ile Asp Val Trp Ala Val Gly Cys Ile Met Ala Glu  
180 185 190  
Val Tyr Thr Leu Arg Pro Leu Phe Pro Gly Ala Ser Glu Ile Asp Thr  
195 200 205  
Ile Phe Lys Ile Cys Gln Val Leu Gly Thr Pro Lys Lys Thr Asp Trp  
210 215 220  
Pro Glu Gly Tyr Gln Leu Ser Ser Ala Met Asn Phe Arg Trp Pro Gln  
225 230 235 240  
Cys Val Pro Asn Asn Leu Lys Thr Leu Ile Pro Asn Ala Ser Ser Glu  
245 250 255  
Ala Val Gln Leu Leu Arg Asp Met Leu Gln Trp Asp Pro Lys Lys Arg  
260 265 270  
Pro Thr Ala Ser Gln Ala Leu Arg Tyr Pro Tyr Phe Gln Val Gly His  
275 280 285  
Pro Leu Gly Ser Thr Thr Gln Asn Leu Gln Asp Ser Glu Lys Pro Gln  
290 295 300  
Lys Gly Ile Leu Glu Lys Ala Gly Pro Pro Pro Tyr Ile Lys Pro Val  
305 310 315 320  
Pro Pro Ala Gln Pro Pro Ala Lys Pro His Thr Arg Ile Ser Ser Arg  
325 330 335  
Gln His Gln Ala Ser Gln Pro Pro Leu His Leu Thr Tyr Pro Tyr Lys  
340 345 350  
Ala Glu Val Ser Arg Thr Asp His Pro Ser His Leu Gln Glu Asp Lys  
355 360 365  
Pro Ser Pro Leu Leu Phe Pro Ser Leu His Asn Lys His Pro Gln Ser  
370 375 380  
Lys Ile Thr Ala Gly Leu Glu His Lys Asn Gly Glu Ile Lys Pro Lys  
385 390 395 400  
Ser Arg Arg Arg Trp Gly Leu Ile Ser Arg Ser Thr Lys Asp Ser Asp



405 410 415  
 Asp Trp Ala Asp Leu Asp Asp Leu Asp Phe Ser Pro Ser Leu Ser Arg  
 420 425 430  
 Ile Asp Leu Lys Asn Lys Lys Arg Gln Ser Asp Asp Thr Leu Cys Arg  
 435 440 445  
 Phe Glu Ser Val Leu Asp Leu Lys Pro Ser Glu Pro Val Gly Thr Gly  
 450 455 460  
 Asn Ser Ala Pro Thr Gln Thr Ser Tyr Gln Arg Arg Asp Thr Pro Thr  
 465 470 475 480  
 Leu Arg Ser Ala Ala Lys Gln His Tyr Leu Lys His Ser Arg Tyr Leu  
 485 490 495  
 Pro Gly Ile Ser Ile Arg Asn Gly Ile Leu Ser Asn Pro Gly Lys Glu  
 500 505 510  
 Phe Ile Pro Pro Asn Pro Trp Ser Ser Ser Gly Leu Ser Gly Lys Ser  
 515 520 525  
 Ser Gly Thr Met Ser Val Ile Ser Lys Val Asn Ser Val Gly Ser Ser  
 530 535 540  
 Ser Thr Ser Ser Ser Gly Leu Thr Gly Asn Tyr Val Pro Ser Phe Leu  
 545 550 555 560  
 Lys Lys Glu Ile Gly Ser Ala Met Gln Arg Val His Leu Ala Pro Ile  
 565 570 575  
 Pro Asp Pro Ser Pro Gly Tyr Ser Ser Leu Lys Ala Met Arg Pro His  
 580 585 590  
 Pro Gly Arg Pro Phe Phe His Thr Gln Pro Arg Ser Thr Pro Gly Leu  
 595 600 605  
 Ile Pro Arg Pro Pro Ala Ala Gln Pro Val His Gly Arg Thr Asp Trp  
 610 615 620  
 Ala Ser Lys Tyr Ala Ser Arg Arg  
 625 630

&lt;210&gt; 2973

&lt;211&gt; 858

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2973

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 180  
 gcctactcct ctcatgaccc agaggcacta acgcgggaac tccaggagca tgtgaaaagg  
 240  
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 300  
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660  
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720  
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780  
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840  
agaaaatgtg gagtgcac  
858

&lt;210&gt; 2974

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2974

Gly	Tyr	Phe	Trp	Phe	Met	Gly	Arg	Thr	Asp	Asp	Val	Ile	Asn	Ser	Ser
1				5					10					15	
Ser	Tyr	Arg	Ile	Gly	Pro	Val	Glu	Val	Glu	Ser	Ala	Leu	Ala	Glu	His
			20					25					30		
Pro	Ala	Val	Leu	Glu	Ser	Ala	Val	Val	Ser	Ser	Pro	Asp	Pro	Ile	Arg
			35				40					45			
Gly	Glu	Val	Val	Lys	Ala	Phe	Ile	Val	Leu	Thr	Pro	Ala	Tyr	Ser	Ser
	50					55					60				
His	Asp	Pro	Glu	Ala	Leu	Thr	Arg	Glu	Leu	Gln	Glu	His	Val	Lys	Arg
65					70					75				80	
Val	Thr	Ala	Pro	Tyr	Lys	Thr	Pro	Arg	Lys	Val	Ala	Phe	Val	Ser	Glu
			85						90					95	
Leu	Pro	Lys	Thr	Val	Ser	Gly	Lys	Ile	Gln	Arg	Ser	Lys	Leu	Arg	Ser
			100				105						110		
Gln	Glu	Trp	Gly	Lys											
			115												

&lt;210&gt; 2975

&lt;211&gt; 1425

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2975

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120  
acaccagaat cccagccaga tactccgcct ggcaccctc tgggtgtcca agatgagaag  
180  
agagatgctg agctgccgaa gaagcgtatg gggaagtcaa accccggctg ggagaacttg  
240  
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gatctggacg ggacgctcat caccacacgc tctgggaagg tctttccac tggccccagt  
360

gactggagga tcttgtaacc agagattccc cgtaagctcc gagagctgga agccgagggc  
420  
tacaagctgg tgatcttcac caaccagatg agcatcgggc gcgggaagct gccagccgag  
480  
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540  
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600  
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1425

&lt;210&gt; 2976

&lt;211&gt; 328

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2976

Pro	Ser	Thr	Thr	Gly	Thr	Gln	Glu	Leu	Lys	Pro	Gly	Leu	Glu	Gly	Ser
1			5						10					15	
Leu	Gly	Val	Gly	Asp	Thr	Met	Tyr	Thr	Val	Asn	Gly	Val	His	Pro	Leu
		20					25					30			
Thr	Leu	Arg	Trp	Glu	Glu	Thr	Arg	Thr	Pro	Glu	Ser	Gln	Pro	Asp	Thr
		35				40					45				
Pro	Pro	Gly	Thr	Pro	Leu	Val	Ser	Gln	Asp	Glu	Lys	Arg	Asp	Ala	Glu
	50					55					60				
Leu	Pro	Lys	Lys	Arg	Met	Gly	Lys	Ser	Asn	Pro	Gly	Trp	Glu	Asn	Leu
65				70				75						80	
Glu	Lys	Leu	Leu	Val	Phe	Thr	Ala	Ala	Gly	Val	Lys	Pro	Gly	Xaa	Lys

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      85      90      95
Val Ala Gly Phe Asp Leu Asp Gly Thr Leu Ile Thr Thr Arg Ser Gly
      100      105      110
Lys Val Phe Pro Thr Gly Pro Ser Asp Trp Arg Ile Leu Tyr Pro Glu
      115      120      125
Ile Pro Arg Lys Leu Arg Glu Leu Glu Ala Glu Gly Tyr Lys Leu Val
      130      135      140
Ile Phe Thr Asn Gln Met Ser Ile Gly Arg Gly Lys Leu Pro Ala Glu
      145      150      155      160
Glu Phe Lys Ala Lys Val Glu Ala Val Val Glu Lys Leu Gly Val Pro
      165      170      175
Phe Gln Val Leu Val Ala Thr His Ala Gly Leu Tyr Arg Lys Pro Val
      180      185      190
Thr Gly Met Trp Asp His Leu Gln Glu Gln Ala Asn Asp Gly Thr Pro
      195      200      205
Ile Ser Ile Gly Asp Ser Ile Phe Val Gly Asp Ala Ala Gly Arg Pro
      210      215      220
Ala Asn Trp Ala Pro Gly Arg Lys Lys Lys Asp Phe Ser Cys Ala Asp
      225      230      235      240
Arg Leu Phe Ala Leu Asn Leu Gly Leu Pro Phe Ala Thr Pro Glu Glu
      245      250      255
Phe Phe Leu Lys Trp Pro Ala Ala Gly Phe Glu Leu Pro Ala Phe Asp
      260      265      270
Pro Arg Thr Val Ser Arg Ser Gly Pro Leu Cys Leu Pro Glu Ser Arg
      275      280      285
Ala Leu Leu Ser Ala Ser Pro Glu Val Val Val Ala Val Gly Phe Pro
      290      295      300
Gly Ala Gly Lys Ser Thr Phe Leu Lys Lys His Leu Val Ser Ala Gly
      305      310      315      320
Tyr Val His Val Thr Gly Thr Arg
      325

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<210> 2977  
 <211> 1420  
 <212> DNA  
 <213> Homo sapiens

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<400> 2977
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120
attgcagaga aaagggccgt cctggcccccac gtggatgtgc agacgctgtc cagccagctg
180
gcagtgcag tggggcctgg tgaacgtcgg atcggcccag gggagccctt ggaactgctg
240
tgcaatgtgt caggggcact tccccagca ggccgcatg ctgcatactc tgtaggttgg
300
gagatggcac ctgcgggggc acctgggccc ggccgcctgg tagcccagct ggacacagag
360
ggtgtgggca gcctgnnggc cctggctatg agggccgacn acattgccat ggagaaggtg
420
gcatccagaa cataccggct acggctagag gctgccaggc ctggtgatgc gggcacctac
480

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 600  
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 660  
 tctgtgcggg gtggccccc aggaactgagg ctggccgcca gctggtgggt ggagcgacca  
 720  
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 780  
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 840  
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 900  
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 960  
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 1020  
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 1200  
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 1260  
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 1320  
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 1380  
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 1420

&lt;210&gt; 2978

&lt;211&gt; 369

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2978

Xaa	Ser	Asn	Ile	His	Ala	Glu	Tyr	Arg	Met	Val	Val	Gly	Gly	Ala	Gln
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Ala	Gly	Asp	Ala	Gly	Thr	Tyr	His	Cys	Thr	Ala	Ala	Glu	Trp	Ile	Gln
		20						25					30		
Asp	Pro	Asp	Gly	Ser	Trp	Ala	Gln	Ile	Ala	Glu	Lys	Arg	Ala	Val	Leu
		35					40					45			
Ala	His	Val	Asp	Val	Gln	Thr	Leu	Ser	Ser	Gln	Leu	Ala	Val	Thr	Val
		50				55					60				
Gly	Pro	Gly	Glu	Arg	Arg	Ile	Gly	Pro	Gly	Glu	Pro	Leu	Glu	Leu	Leu
65					70				75					80	
Cys	Asn	Val	Ser	Gly	Ala	Leu	Pro	Pro	Ala	Gly	Arg	His	Ala	Ala	Tyr
			85					90						95	
Ser	Val	Gly	Trp	Glu	Met	Ala	Pro	Ala	Gly	Ala	Pro	Gly	Pro	Gly	Arg
		100					105					110			
Leu	Val	Ala	Gln	Leu	Asp	Thr	Glu	Gly	Val	Gly	Ser	Leu	Xaa	Ala	Leu

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      115      120      125
Ala Met Arg Ala Asp Xaa Ile Ala Met Glu Lys Val Ala Ser Arg Thr
      130      135      140
Tyr Arg Leu Arg Leu Glu Ala Ala Arg Pro Gly Asp Ala Gly Thr Tyr
145      150      155      160
Arg Cys Leu Ala Lys Ala Tyr Val Arg Gly Ser Gly Thr Arg Leu Arg
      165      170      175
Glu Ala Ala Ser Ala Arg Ser Arg Pro Leu Pro Val His Val Arg Glu
      180      185      190
Glu Gly Val Val Leu Glu Ala Val Ala Trp Leu Ala Gly Gly Thr Val
      195      200      205
Tyr Arg Gly Glu Thr Ala Ser Leu Leu Cys Asn Ile Ser Val Arg Gly
      210      215      220
Gly Pro Pro Gly Leu Arg Leu Ala Ala Ser Trp Trp Val Glu Arg Pro
225      230      235      240
Glu Asp Gly Glu Leu Ser Ser Val Pro Ala Gln Leu Val Gly Gly Val
      245      250      255
Gly Gln Asp Gly Val Ala Glu Leu Gly Val Arg Pro Gly Gly Gly Pro
      260      265      270
Val Ser Val Glu Leu Val Gly Pro Arg Ser His Arg Leu Arg Leu His
      275      280      285
Ser Leu Gly Pro Glu Asp Glu Gly Val Tyr His Cys Ala Pro Ser Ala
      290      295      300
Trp Val Gln His Ala Asp Tyr Ser Trp Tyr Gln Ala Gly Ser Ala Arg
305      310      315      320
Ser Gly Pro Val Thr Val Tyr Pro Tyr Met His Ala Leu Asp Thr Leu
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Phe Val Pro Leu Leu Val Gly Thr Gly Val Ala Leu Val Thr Gly Ala
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&lt;210&gt; 2979

&lt;211&gt; 2191

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2979

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<212> PRT  
<213> Homo sapiens

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Gly Thr Glu His Gly Gln Pro Phe Ala Arg Gly Trp Gly Ala Trp Gly  
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Asn Ala Arg Arg Ala Arg Val Gly Arg Ala Glu Cys Leu Leu Ser Gly  
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Arg Pro Pro Thr Ala Val Leu Pro Arg Leu Val Glu Asn Leu Lys Ala  
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Arg Val Pro Val Pro Gly His Thr Glu Pro Leu Trp Ser Glu Gly Thr  
85 90 95  
Ala Pro Gly Gln Gly Leu Trp Ser His Ala Pro Ala Asp Gly Ser Leu  
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<212> DNA  
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420  
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480



gaagacagcc ctggccacta aaagaggggg gatcgtgctg gccaaaggta tcggaaatct  
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<210> 2982  
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<212> PRT  
<213> Homo sapiens

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His Ser Ser Ser Ser Glu Glu Ser Thr Lys Arg Thr Ser His Ser Lys  
35 40 45  
Leu Pro Glu Gln Glu Ala Ala Glu Ala Asp Leu Ser Asn Met Glu Arg  
50 55 60  
Val Ser Leu Ser Thr Ala Asp Pro Gln Gly Val Thr Tyr Ala Glu Leu  
65 70 75 80  
Ser Thr Ser Ala Leu Ser Glu Ala Ala Ser Asp Thr Thr Gln Glu Pro  
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<210> 2983  
<211> 614  
<212> DNA  
<213> Homo sapiens

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420  
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<212> PRT  
<213> Homo sapiens

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Gly Ala Gly Arg Val Gly Lys Ser Ala Met Ile Val Arg Phe Leu Thr  
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Lys Arg Phe Ile Gly Asp Tyr Glu Pro Asn Thr Gly Lys Leu Tyr Ser  
50 55 60  
Arg Leu Val Tyr Val Glu Gly Asp Gln Leu Ser Leu Gln Ile Gln Asp  
65 70 75 80  
Thr Pro Gly Gly Val Gln Ile Gln Asp Ser Leu Pro Gln Val Val Asp  
85 90 95  
Ser Leu Gln Met Arg Ala Val Ala Glu Gly Phe Leu Leu Val Tyr Ser  
100 105 110  
Ile Thr Asp Tyr Asp Ser Tyr Leu Ser Ile Arg Pro Leu Tyr Gln His  
115 120 125  
Ile Arg Lys Val His Pro Asp Ser Lys Ala Pro Val Ile Ile Val Gly  
130 135 140  
Asn Lys Gly Asp Leu Leu His Ala Arg Gln Val Gln Thr Gln Asp Gly  
145 150 155 160  
Ile Gln Leu Ala Asn Glu Leu Gly Ser Leu Phe Leu Glu Ile Ser Thr  
165 170 175  
Ser Glu Asn Tyr Glu Asp Val Cys Asp Val Phe Gln His Leu Cys Lys  
180 185 190  
Glu Val Ser Lys Met His Gly Leu Ser Gly Glu Arg  
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<210> 2985  
<211> 4547  
<212> DNA  
<213> Homo sapiens

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&lt;210&gt; 2986

&lt;211&gt; 988

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2986

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 20 25 30  
 Glu Leu Cys Val Lys Leu Met Phe Leu His Pro Val Asp Tyr Gly Arg  
 35 40 45  
 Lys Ala Glu Glu Leu Leu Trp Arg Lys Val Tyr Tyr Glu Val Ile Gln  
 50 55 60  
 Leu Ile Lys Thr Asn Lys Lys His Ile His Ser Arg Ser Thr Leu Glu  
 65 70 75 80  
 Cys Ala Tyr Arg Thr His Leu Val Ala Gly Ile Gly Phe Tyr Gln His  
 85 90 95  
 Leu Leu Leu Tyr Ile Gln Ser His Tyr Gln Leu Glu Leu Gln Cys Cys  
 100 105 110  
 Ile Asp Trp Thr His Val Thr Asp Pro Leu Ile Gly Cys Lys Lys Pro

115 120 125  
Val Ser Ala Ser Gly Lys Glu Met Asp Trp Ala Gln Met Ala Cys His  
130 135 140  
Arg Cys Leu Val Tyr Leu Gly Asp Leu Ser Arg Tyr Gln Asn Glu Leu  
145 150 155 160  
Ala Gly Val Asp Thr Glu Leu Leu Ala Glu Arg Phe Tyr Tyr Gln Ala  
165 170 175  
Leu Ser Val Ala Pro Gln Ile Gly Met Pro Phe Asn Gln Leu Gly Thr  
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Leu Ala Gly Ser Lys Tyr Tyr Asn Val Glu Ala Met Tyr Cys Tyr Leu  
195 200 205  
Arg Cys Ile Gln Ser Glu Val Ser Phe Glu Gly Ala Tyr Gly Asn Leu  
210 215 220  
Lys Arg Leu Tyr Asp Lys Ala Ala Lys Met Tyr His Gln Leu Lys Lys  
225 230 235 240  
Cys Glu Thr Arg Lys Leu Ser Pro Gly Lys Lys Arg Cys Lys Asp Ile  
245 250 255  
Lys Arg Leu Leu Val Asn Phe Met Tyr Leu Gln Ser Leu Leu Gln Pro  
260 265 270  
Lys Ser Ser Ser Val Asp Ser Glu Leu Thr Ser Leu Cys Gln Ser Val  
275 280 285  
Leu Glu Asp Phe Asn Leu Cys Leu Phe Tyr Leu Pro Ser Ser Pro Asn  
290 295 300  
Leu Ser Leu Ala Ser Glu Asp Glu Glu Glu Tyr Glu Ser Gly Tyr Ala  
305 310 315 320  
Phe Leu Pro Asp Leu Leu Ile Phe Gln Met Val Ile Ile Cys Leu Met  
325 330 335  
Cys Val His Ser Leu Glu Arg Ala Gly Ser Lys Gln Tyr Ser Ala Ala  
340 345 350  
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355 360 365  
Ile Arg Leu Gln Ala Glu Leu Glu Glu Gly Glu Asn Pro Val Pro Ala  
370 375 380  
Phe Gln Ser Asp Gly Thr Asp Glu Pro Glu Ser Lys Glu Pro Val Glu  
385 390 395 400  
Lys Glu Glu Glu Pro Asp Pro Glu Pro Pro Pro Val Thr Pro Gln Val  
405 410 415  
Gly Glu Gly Arg Lys Ser Arg Lys Phe Ser Arg Leu Ser Cys Leu Arg  
420 425 430  
Arg Arg Arg His Pro Pro Lys Val Gly Asp Asp Ser Asp Leu Ser Glu  
435 440 445  
Gly Phe Glu Ser Asp Ser Ser His Asp Ser Ala Arg Ala Ser Glu Gly  
450 455 460  
Ser Asp Ser Gly Ser Asp Lys Ser Leu Glu Gly Gly Gly Thr Ala Phe  
465 470 475 480  
Asp Ala Glu Thr Asp Ser Glu Met Asn Ser Gln Glu Ser Arg Ser Asp  
485 490 495  
Leu Glu Asp Met Glu Glu Glu Glu Gly Thr Arg Ser Pro Thr Leu Glu  
500 505 510  
Pro Pro Arg Gly Arg Ser Glu Ala Pro Asp Ser Leu Asn Gly Pro Leu  
515 520 525  
Gly Pro Ser Glu Ala Ser Ile Ala Ser Asn Leu Gln Ala Met Ser Thr  
530 535 540  
Gln Met Phe Gln Thr Lys Arg Cys Phe Arg Leu Ala Pro Thr Phe Ser

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Glu	Glu	Gly	Ser	Glu	Ser	Glu	Gly	Ser	Glu	Ser	Ser	Gly	Arg	Ser	Cys
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Arg	Asn	Glu	Arg	Ser	Ile	Gln	Glu	Lys	Leu	Gln	Val	Leu	Met	Ala	Glu
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Glu	Ser	Gly	Leu	Ala	Leu	Cys	Pro	Glu	Val	Gln	Asp	Leu	Leu	Glu	Gly
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Cys	Glu	Leu	Pro	Asp	Leu	Pro	Ser	Ser	Leu	Leu	Leu	Pro	Glu	Asp	Met
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Ala	Leu	Arg	Asn	Leu	Pro	Pro	Leu	Arg	Ala	Ala	His	Arg	Arg	Phe	Asn
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Phe	Asp	Thr	Asp	Arg	Pro	Leu	Leu	Ser	Thr	Leu	Glu	Glu	Ser	Val	Val
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Arg	Ile	Cys	Cys	Ile	Arg	Ser	Phe	Gly	His	Phe	Ile	Ala	Arg	Leu	Gln
		740												745	
Gly	Ser	Ile	Leu	Gln	Phe	Asn	Pro	Glu	Val	Gly	Ile	Phe	Val	Ser	Ile
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Ala	Gln	Ser	Glu	Gln	Glu	Ser	Leu	Leu	Gln	Gln	Ala	Gln	Ala	Gln	Phe
		770												775	
Arg	Met	Ala	Gln	Glu	Glu	Ala	Arg	Arg	Asn	Arg	Leu	Met	Arg	Asp	Met
		785												790	
Ala	Gln	Leu	Arg	Leu	Gln	Leu	Glu	Val	Ser	Gln	Leu	Glu	Gly	Ser	Leu
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Gln	Gln	Pro	Lys	Ala	Gln	Ser	Ala	Met	Ser	Pro	Tyr	Leu	Val	Pro	Asp
		820												825	
Thr	Gln	Ala	Leu	Cys	His	His	Leu	Pro	Val	Ile	Arg	Gln	Leu	Ala	Thr
		835												840	
Ser	Gly	Arg	Phe	Ile	Val	Ile	Ile	Pro	Arg	Thr	Val	Ile	Asp	Gly	Leu
		850												855	
Asp	Leu	Leu	Lys	Lys	Glu	His	Pro	Gly	Ala	Arg	Asp	Gly	Ile	Arg	Tyr
		865												870	
Leu	Glu	Ala	Glu	Phe	Lys	Lys	Gly	Asn	Arg	Tyr	Ile	Arg	Cys	Gln	Lys
		885												890	
Glu	Val	Gly	Lys	Ser	Phe	Glu	Arg	His	Lys	Leu	Lys	Arg	Gln	Asp	Ala
		900												905	
Asp	Ala	Trp	Thr	Leu	Tyr	Lys	Ile	Leu	Asp	Ser	Cys	Lys	Gln	Leu	Thr
		915												920	
Leu	Ala	Gln	Gly	Ala	Gly	Glu	Glu	Asp	Pro	Ser	Gly	Met	Val	Thr	Ile
		930												935	
Ile	Thr	Gly	Leu	Pro	Leu	Asp	Asn	Pro	Ser	Val	Leu	Ser	Gly	Pro	Met
		945												950	
Gln	Ala	Ala	Leu	Gln	Ala	Ala	Ala	His	Ala	Ser	Val	Asp	Ile	Lys	Asn
		965												970	
Val	Leu	Asp	Phe	Tyr	Lys	Gln	Trp	Lys	Glu	Ile	Gly				

980

985

&lt;210&gt; 2987

&lt;211&gt; 1016

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2987

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240  
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1016

&lt;210&gt; 2988

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2988

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2224



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<212> DNA
<213> Homo sapiens
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2225

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 <211> 114  
 <212> PRT  
 <213> Homo sapiens

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 Trp Glu Glu Trp Gln Asp Leu Asp Asp Ala Gln Arg Thr Leu Tyr Arg  
 35 40 45  
 Asp Val Met Leu Glu Thr Tyr Ser Ser Leu Val Ser Leu Gly His Cys  
 50 55 60  
 Ile Thr Lys Pro Glu Met Ile Phe Lys Leu Glu Gln Gly Ala Glu Pro  
 65 70 75 80  
 Trp Ile Val Glu Glu Thr Leu Asn Leu Arg Leu Ser Gly Gly Ser Lys  
 85 90 95  
 Lys Gln Val Phe Ser Gly Ile Cys His Arg Ser Leu Val Glu Leu Gln  
 100 105 110  
 Glu Val

<210> 2991  
 <211> 980  
 <212> DNA  
 <213> Homo sapiens

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780  
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<210> 2992  
<211> 64  
<212> PRT  
<213> Homo sapiens

<400> 2992  
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His Thr Gly Pro Phe Thr Glu Val Ser Pro Gly Ala Leu Gly Trp Pro  
20 25 30  
Val Leu Cys Ser Gly Leu Leu Leu Gly Gly Leu Gly Ala Ala His Phe  
35 40 45  
Ala Ser Ala Val Ser Gly His Ser Ser Ala Ser Leu Gln Ala Ala Ser  
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<210> 2993  
<211> 687  
<212> DNA  
<213> Homo sapiens

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<210> 2994  
<211> 229  
<212> PRT  
<213> Homo sapiens

<400> 2994  
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Ala Val Ala Thr Ser Pro Asp Gly Arg Tyr Leu Lys Phe Asp Ile Glu  
35 40 45  
Ile Gly Arg Gly Ser Phe Lys Thr Val Tyr Arg Gly Leu Asp Thr Asp  
50 55 60  
Thr Thr Val Glu Val Ala Trp Cys Glu Leu Gln Thr Arg Lys Leu Ser  
65 70 75 80  
Arg Ala Glu Arg Gln Arg Phe Ser Glu Glu Val Glu Met Leu Lys Gly  
85 90 95  
Leu Gln His Pro Asn Ile Val Arg Phe Tyr Asp Ser Trp Lys Ser Val  
100 105 110  
Leu Arg Gly Gln Val Cys Ile Val Leu Val Thr Glu Leu Met Thr Ser  
115 120 125  
Gly Thr Leu Lys Thr Tyr Leu Arg Arg Phe Arg Glu Met Lys Pro Arg  
130 135 140  
Val Leu Gln Arg Trp Ser Arg Gln Ile Leu Arg Gly Leu His Phe Leu  
145 150 155 160  
His Ser Arg Val Pro Ile Leu His Arg Asp Leu Lys Cys Asp Asn  
165 170 175  
Val Phe Ile Thr Gly Pro Thr Gly Ser Val Lys Ile Gly Asp Leu Gly  
180 185 190  
Leu Ala Thr Leu Lys Arg Ala Ser Phe Ala Lys Ser Val Ile Gly Thr  
195 200 205  
Pro Glu Phe Met Ala Pro Glu Met Tyr Glu Glu Lys Tyr Asp Glu Ala  
210 215 220  
Val Asp Val Tyr Ala  
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<210> 2995  
<211> 1879  
<212> DNA  
<213> Homo sapiens

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180  
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240

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<210> 2996

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2996

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			20					25				30			
Leu	Xaa	Thr	Gln	Ala	Gly	Ile	Gln	Trp	Cys	Asp	Leu	Ser	Ser	Leu	Gln
			35				40					45			
Pro	Pro	Pro	Pro	Arg	Phe	Lys	Arg	Phe	Ser	Cys	Leu	Ser	Leu	Leu	Ser
	50					55					60				
Ser	Trp	Asp	Ser	Asp	Arg	Cys	Leu	Pro	Pro	His	Pro	Gly	Asp	Phe	Cys
65					70				75					80	
Ile	Phe	Ser	Arg	Asp	Gly	Val	Ser	Pro	Cys	Cys	Ser	Gly	Trp	Ser	Arg
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Thr	Pro	Asp	Leu	Lys											
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<210> 2997

<211> 800

<212> DNA

<213> Homo sapiens

<400> 2997

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<210> 2998  
<211> 266  
<212> PRT  
<213> Homo sapiens

<400> 2998  
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20 25 30  
Ser Thr Ile Lys Asp Ile Val Ser Thr Thr Ile Pro Ala Ser Ser Glu  
35 40 45  
Ile Thr Arg Ile Glu Met Glu Ser Thr Ser Thr Leu Thr Pro Thr Pro  
50 55 60  
Arg Glu Thr Ser Thr Ser Gln Glu Ile His Ser Ala Thr Lys Pro Ser  
65 70 75 80  
Thr Val Pro Tyr Lys Ala Leu Thr Ser Ala Thr Ile Glu Asp Ser Met  
85 90 95  
Thr Gln Val Met Ser Ser Ser Arg Gly Pro Ser Pro Asp Gln Ser Thr  
100 105 110  
Met Ser Gln Asp Ile Ser Thr Glu Val Ile Thr Arg Leu Ser Thr Ser  
115 120 125  
Pro Ile Lys Thr Glu Ser Thr Glu Met Thr Ile Thr Thr Gln Thr Gly  
130 135 140  
Ser Pro Gly Ala Thr Ser Arg Gly Thr Leu Thr Leu Asp Thr Ser Thr  
145 150 155 160  
Thr Phe Met Ser Gly Thr His Ser Thr Ala Ser Gln Arg Phe Ser His  
165 170 175  
Ser Gln Met Thr Ala Leu Met Ser Arg Thr Pro Gly Asp Val Pro Trp  
180 185 190  
Leu Thr His Pro Ser Gly Glu Glu Pro Ala Ser Ala Ser Phe Ser Leu  
195 200 205  
Ala Ser Pro Val Leu Thr Ser Phe Phe Ser Phe Phe Ala His Ser Gln  
210 215 220  
Lys Pro Pro Pro Phe Leu Val Pro Gly Gln Thr Phe Ser Leu Gly Leu  
225 230 235 240  
Gly Lys Pro Lys Met Trp Gly Gln Pro Arg Thr Glu Thr Phe Pro Pro  
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Met Asp Asn Leu Phe Glu Lys Gly Pro Phe  
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<210> 2999  
<211> 550  
<212> DNA  
<213> Homo sapiens

<400> 2999  
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<210> 3000  
<211> 167  
<212> PRT  
<213> Homo sapiens

<400> 3000  
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Ala Phe Met Gly Leu Arg Gly Glu Lys Val His Ala Asn Ser Ser Met  
35 40 45  
Gly Gly His Gly Trp Ala Gln Gly Lys Ala Pro Gln Val Ala Leu Ala  
50 55 60  
Val Ser Gly Thr Gly Asp Pro Ser Pro Arg Leu Gln Ala Phe Pro Gly  
65 70 75 80  
Leu Glu Val Gly Leu His Cys Gly Pro Ala Ser Phe His Pro Gly Ala  
85 90 95  
Cys Leu Pro Pro Ala Ala Val His Gly Asp Gln Ala Val His Val Lys  
100 105 110  
Gly Cys Leu Gln Ala Ser Thr Gly Leu Ser Ser Val His Pro Ser Ala  
115 120 125  
Ser Phe Pro Cys Leu Ser Val Pro Lys Ala Trp Arg Gly Pro Lys Trp  
130 135 140  
Gln Gly Gly Trp His Val Ser Thr Thr Pro Ser Met Cys Thr Leu Ser  
145 150 155 160  
Trp Ala Val Thr Ala Pro Gly  
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<210> 3001  
<211> 1092  
<212> DNA  
<213> Homo sapiens

<400> 3001



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1092

<210> 3002  
<211> 115  
<212> PRT  
<213> Homo sapiens

<400> 3002  
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Glu Val Gln Arg Leu Ser Pro Tyr Val Cys Leu Gly Glu Ser Gln Lys  
35 40 45  
Val Glu Ser Gln Pro Cys Ser Ala His Gln Cys Phe Phe Tyr Asn Pro  
50 55 60  
Asp Ile Ala Lys Thr Ala Val Pro Thr Glu Ala Ser Ser Pro Ala Gln